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The American Economic Review

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March, 1917

Papers and Proceedings

of the

Twenty-ninth Annual Meeting

of the

American Economic Association

COLUMBUS, OHIO

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PROGRAM OF TWENTY-NINTH ANNUAL MEETING

WEDNESDAY, December 27

8:00 P. M. FIRST SESSION

Presiding, William Oxley Thompson, President of the Ohio State University

Presidents' Addresses

THE NATIONAL POINT OF VIEW IN ECONOMICS

Thomas N. Carver, The American Economic Association

COUNTRYSIDE AND NATION

George E. Vincent, The American Sociological Society

THE NEED FOR HEALTH INSURANCE

Irving Fisher, The American Association for Labor Legislation

THURSDAY, December 28

9:00 A. M. Business meeting of the Association

10:00 A. M. SECOND SESSION

LANDED PROPERTY AS AN ECONOMIC CONCEPT AND AS A FIELD OF RESEARCH

Richard T. Ely, The University of Wisconsin

Discussion under the ten-minute rule

Frank A. Fetter, Princeton University

Carl Vrooman, United States Department of Agriculture

E. Dana Durand, The University of Minnesota

B. H. Hibbard, The University of Wisconsin

Discussion from the floor under the five-minute rule

Roy G. Blakey, The University of Minnesota

R. R. Bowker, New York City

A. B. Wolfe, The University of Texas

John A. Ryan, Catholic University of America

2:30 P. M. THIRD SESSION

TWO DIMENSIONS OF ECONOMIC PRODUCTIVITY, WITH AGRICULTURAL ILLUSTRATIONS

Henry C. Taylor, The University of Wisconsin

Discussion under the ten-minute rule

E. Dana Durand, The University of Minnesota

Allyn A. Young, Cornell University

Discussion from the floor under the five-minute rule

Frank A. Fetter, Princeton University

J. G. Thompson, The University of Illinois

THE RESULTS OF SOME SOCIAL SURVEYS IN IOWA

George H. Von Tungeln, Iowa State College

Discussion under the ten-minute rule

Paul S. Peirce, The State University of Iowa

8:00 P. M. FOURTH SESSION

THE LAND PROBLEM AND RURAL WELFARE

Paul L. Vogt, The Ohio State University

Discussion under the ten-minute rule

W. O. Hedrick, Michigan State College

James B. Morman, Washington, D. C.

Discussion from the floor under the five-minute rule

George H. Von Tungeln, Iowa State College

J. G. Thompson, The University of Illinois

C. L. Stewart, The University of Illinois

THE FEDERAL FARM LOAN ACT

C. W. Thompson, United States Department of Agriculture

Discussion under the ten-minute rule

Kingman Nott Robins, Rochester, N. Y.

James B. Morman, Washington, D. C.

10:00 P. M. Smoker at the Hotel Deshler, tendered by the local members of the Association

FRIDAY, December 29

10:00 A. M. FIFTH SESSION

DO THE STATISTICS OF THE CONCENTRATION OF WEALTH IN THE UNITED STATES MEAN WHAT THEY ARE COMMONLY ASSUMED TO MEAN?

Allyn A. Young, Cornell University

Willford I. King, The University of Wisconsin

Discussion under the ten-minute rule

Davis R. Dewey, Massachusetts Institute of Technology

Irving Fisher, Yale University

Discussion from the floor under the five-minute rule

George E. Roberts, New York City

Robert L. Hale, Columbia University

Mrs. Wilbur C. Phillips, New York City

H. J. Davenport, Cornell University

H. F. Arens, Wellesley Hills, Mass.

E. E. Lincoln, Harvard University

Carl W. Parker, The University of California

1:30 P. M. A luncheon was served to the visiting Associations by the Ohio State University

2:30 P. M. SIXTH SESSION

THE SITUATION OF THE UNITED STATES AT THE CLOSE OF THE EUROPEAN WAR WITH SPECIAL REFERENCE TO THE GOLD SUPPLY

George E. Roberts, National City Bank, New York City

Discussion under the ten-minute rule

Murray S. Wildman, Stanford University

Discussion from the floor under the five-minute rule

E. M. Patterson, The University of Pennsylvania

Don C. Barrett, Haverford College

Roger W. Babson, Wellesley Hills, Mass.

LOANS AND TAXES IN WAR FINANCE

O. M. W. Sprague, Harvard University

Discussion under the ten-minute rule

E. T. Miller, The University of Texas

H. L. Lutz, Oberlin College

Discussion from the floor under the five-minute rule

H. J. Davenport, Cornell University

E. E. Lincoln, Harvard University

T. K. Urdahl, The University of Wisconsin

R. W. Babson, Wellesley Hills, Mass.

6:30 P. M. SEVENTH SESSION

Banquet at the Columbus Athletic Club, followed by addresses

John R. Wildman, New York University

Roger W. Babson, Babson's Statistical Organization

Walter F. Willcox, Cornell University

James A. Field, The University of Chicago

Mrs. Haviland H. Lund, New York City

William O. Thompson, The Ohio State University

SATURDAY, December 30

9:30 A. M. Business meeting of the Association

10:00 A. M. EIGHTH SESSION

SOME PHASES OF THE MINIMUM WAGE QUESTION

J. E. Le Rossignol, The University of Nebraska

Discussion under the ten-minute rule

A. B. Wolfe, The University of Texas

C. W. Doten, Massachusetts Institute of Technology

W. Z. Ripley, Harvard University

Discussion from the floor under the five-minute rule

Carleton H. Parker, The University of California

John Voll, Ohio State Federation of Labor

Ethelbert Stewart, United States Bureau of Labor

Mr. Donnelly, Ohio State Federation of Labor

John A. Ryan, Catholic University of America

Robert L. Hale, Columbia University

THE NATIONAL POINT OF VIEW IN ECONOMICS

ANNUAL ADDRESS OF THE PRESIDENT

THOMAS N. CARVER
Harvard University

A convenient text is found in one of the most profound but least appreciated passages in *The Wealth of Nations*. Apropos of systems of land tenure the passage reads: "When land, like movables, is considered as the means only of subsistence and enjoyment, the natural law of succession divides it, like them, among all the children of the family; of all of whom the subsistence and enjoyment may be supposed to be equally dear to the father. . . . But when land was considered as the means, not of subsistence merely, but of power and protection, it was thought better that it should descend undivided to one."¹

Here was a clear recognition of one of the most important principles of national policy. When a nation is thinking primarily of its own growth, prosperity, and power, of its ability to meet the conditions of life as a nation, its institutions and its policies may be very different from what they would be if it were thinking primarily of the consumers' satisfactions or of the enjoyment which it might afford to its individual citizens. It may be added that when its individual citizens themselves are thinking primarily of the prosperity, power, and greatness of the nation they will frame institutions and carry out policies very different from those which they will frame and carry out if they are thinking primarily of their own satisfaction as consumers, or of their own subsistence or enjoyment. Moreover, if economists, however completely they may be divorced from sentiment, are thinking in terms primarily of national prosperity, power, and greatness, their conclusions on many important questions will be very different from what they would be if they were thinking primarily of consumers' satisfactions, of subsistence, or of enjoyment. The economics of consumers' happiness is one thing; the economics of national power and greatness is another thing.

Adam Smith's remarks on primogeniture may or may not be a case in point. We may or may not agree that primogeniture does work better in the process of nation-building and expansion than equal subdivision. As was remarked long ago, it was at least a

¹ Book III, Chap. II.

guarantee that there would be only one drone in the same family. It at least made it necessary that the younger sons go out into the world and shift for themselves. They were not encouraged to hang around home waiting for the old folk to die in order that they might get a share of the estate. They had to go where there was land and build estates of their own, if they wanted them. This may have had something to do with the expansion of the English race and of the British Empire. On the other hand, in those old countries where the Code Napoléon had been in force there has been little expansion. Relatively speaking, there has been a decline in power both economic and military.

And yet, to anyone who thinks mainly in terms of consumers' satisfactions, of fair play and equal rights in matters of enjoyment, primogeniture seems a monstrous iniquity, and the equal subdivision of land among all heirs is the only system which is even tolerable. Of course there may be those who realize that it is better for the individual to belong to a prosperous, powerful, and expanding nation than to an unprosperous, weak, and contracting nation. This consideration might lead them to surrender many consumers' satisfactions in the immediate present in the interest of nation-building, hoping that they, their children or their childrens' children may gain enough consumers' satisfactions in the future to compensate for the sacrifices of the present. This would bring them very close to those who think primarily in terms of nation-building, if it did not identify them absolutely. They might, even though they themselves were younger sons, favor primogeniture if they were convinced that it promoted the prosperity, power, and expansion of the nation, hoping that their children and their childrens' children would gain enough through citizenship in such a country to compensate for the loss to themselves.

This, however, is not intended as a defense of primogeniture. I use this illustration partly because it was dignified by the great Adam Smith, and partly because it is, in itself, a good illustration of the principle which I am trying to make clear. Another illustration, less realistic and less disputable, may be manufactured for the occasion. If, instead of the father's landed estate, we were to consider the father's sword as the object which passes by inheritance, the point may be made clear. If, with the inheritance of the father's sword, there was also inherited the obligation to use it for the defense or the building of the nation, it could scarcely

be considered as depriving the other sons of their rights if the sword went intact to one, instead of being divided up. That would be so obviously sensible that no one would be likely to champion the rights of the disinherited sons. But if, instead of a weapon or a tool to be used in nation-building, the sword were thought of as an object of pleasure, a consumer's good, the case would be different. They who think in terms of consumers' satisfactions are uniformly rather strenuous in their insistence upon their full share. The same rule which seems so obviously sensible from the other point of view becomes obviously and wickedly unfair and stupid from the new point of view. The whole difference is in the point of view.

There is another illustration equally clear and to the point, and also dignified by an eminent and highly respected authority. It is found in the story of a certain ruler who entrusted sundry pieces of money to his servants, to one five, to another two, and to another one. He who had received one piece of money did not use it but hid it away. When the ruler returned he ordered that this one piece of money be taken away from the man who had not used it, and that it be given to the one who had used his five so productively as to gain another five. Now, I venture to say that no one who thinks of pieces of money as sources of subsistence or enjoyment ever understood this story or ever will so long as the world stands. But one who thinks of pieces of money as tools to be used in nation-building, finds the story so obviously sensible as almost to preclude the possibility of discussion. Such a person can see no reason for inventing the absurd theory that pieces of money did not mean what they obviously did mean, but spiritual qualities instead. He would know that it is a waste of good tools to have them hidden away, and that in the interest of society or of the nation they ought to be taken away from the one who thus wastes them and given to the one who shows his capacity to use them productively. However, to one who thinks only or primarily in terms of consumers' satisfactions, and to whom pieces of money are merely sources of consumers' satisfaction, it would seem monstrously unjust to take away from the poor man the one source of satisfaction which he possessed and give it over to the rich man who had ten already. The same rule, again, looks very different from the two points of view. It is the point of view that makes the difference.

If one were permitted to step outside the field of economics in the narrower sense, and make an observation or two in the field

of economics in the broader sense, now temporarily cultivated by the moralist, one might remark that the concentration of attention upon subsistence and enjoyment rather than upon nation-building, leads to an exaggerated insistence upon the rights of the individual, whereas the concentration of attention upon nation-building leads to a strong emphasis upon the obligations of the individual. Therefore, there are two distinct types of leadership. One type tells the people a great deal about their rights, their wrongs, and their grievances, and very little about their obligations, except their obligations to themselves. The other type tells them very little about their rights, their wrongs, and their grievances, but a great deal about their obligations. The first type is a logical product of the habit of mind which lays emphasis upon the subsistence and enjoyment of the individual; the other of the habit of mind which lays emphasis upon the importance of building a strong, durable, and expanding nation.

The fact that a change in the point of view makes such a vast difference in the way the same thing looks to us will also explain the change which frequently comes over a man when he has, through popular leadership, come into a position of power and responsibility. It has often been noticed that a man who has achieved leadership through demagogic appeals to the masses becomes a different man when put into high public position. If he does not, he does not last long, being repudiated even by the followers who put him in. As a champion of those who think in terms of their own subsistence and enjoyment, he was one kind of man and things really looked to him in a certain way. In high national office he is compelled to think in terms of the nation as a whole. If he does not, he is such an obvious misfit that even the sense of humor of the masses can not tolerate him. If he does, many things which formerly looked black now look white and many which looked white now look black. It is very easy for the conservative, on the one hand, to say that responsibility has sobered him. He has not necessarily grown more sober; frequently he is less so. He is usually even more of a visionary, the difference being that he has got a larger vision. It is equally easy, on the other hand, for those who have not yet achieved high office to say that he has sold out to the interests. Generally he is less under the domination of interests than he was before. The simple fact is that he is forced to see things from a national point of view rather than from a particularistic point of view; and the sheer

logic of the situation forces different views and a different attitude upon him.

The change in the point of view produces some of its widest divergences of opinion on the question of government regulation and control. When we think primarily in terms of our own satisfactions we are rather intolerant of government regulation when it affects us directly. We may be very tolerant of, or favorable toward, government regulation of other people; but as for ourselves, we want none of it. We are all consumers, therefore regulation of consumption is abhorrent. The regulation or control of some particular line of business is a different matter, especially if it is not our business. Yet habits of consumption are quite as important to the welfare of the nation, considered as a nation, as methods of business. It is generally believed that nations have deteriorated quite as frequently and quite as rapidly because of their bad habits of consumption as because of the bad methods of any or of all classes of business men. When one takes the national point of view, that is a consideration of the very greatest importance. Those academic distinctions between regulation of consumption and regulation of production seem trivial in comparison. As a matter of observed fact, the people who think in terms of nationality are just as prone to legislate on matters of consumption as on matters of business. The government regulation, or prohibition, of the consumption of alcohol, is quite the most popular and democratic movement in this country today, particularly among those who have been here long enough to develop a sense of nationality. Again, as a matter of observed fact, whenever a nation is, in the vernacular, "up against the real thing," when its very existence as a nation is at stake, and when it is forced to think in terms of nationality, it always finds it just as necessary that its government should regulate consumption as that it should regulate production.

Another and even more striking example of this divergence of opinion is found in our attitude toward control or regulation of speech. I make my living by talking, as do a fair percentage of the active members of this Association. We are therefore unable, most of us, to see any reason why the government should regulate our business. We are pretty strong for freedom of speech and freedom of the press and all other euphemisms for a *laissez-faire* policy with respect to the business of talking. It also happens, curiously enough, that they whose business is talking are the strongest advocates of the abandonment of the *laissez-faire* policy

—with respect to business—that is, other kinds of business. For much the same reason, they whose business consists in doing rather than in talking are too frequently impatient of loose talk and disposed toward its control. It would be a profitable exercise for all of us to ponder a little more upon the ancient remark about those who were more anxious to pluck motes from their brothers' eyes than beams from their own. That would do us more good than to spend our time inventing absurd reasons why the government should regulate other people's business and pursue a *laissez-faire* policy with respect to our own.

There can scarcely be any doubt that bad talk may do quite as much harm to the nation as bad business. As many and as direful calamities have come upon the world through bad talk, false teaching, pernicious opinions, as through bad business methods. He who teaches falsehood probably harms the people more than he who steals a million dollars, though it will appear otherwise to those who think that truth is unimportant and money all important. The only question is, Can we trust government officials with the delicate task of deciding what is good and what is bad talk, and of suppressing the bad? Well, any government official who thinks that he is wise enough to regulate industry is not likely to be withheld by his own modesty from undertaking the regulation of speech. Again, as a matter of observed fact, no government official does hesitate to exercise censorship so far as his authority extends. Over the members of his own staff, which is as far as his power extends, he does exercise control of speech. Even the least free and most narrowly sectarian college in this country allows more freedom to its staff than the most liberal department of this freest of all governments. The head of a department who is at all ingenuous will frankly acknowledge this, and justify it by the perfectly sound reason that any department which is charged with important regulatory powers must control the utterances of its staff. I mention these things neither to justify nor to condemn, but merely to show that one kind of regulation is very likely to lead to another.

Again, as a matter of observed fact, whenever any nation "comes up against the real thing," when circumstances compel it to think in terms of its own existence as a nation, it finds it necessary, through its government, to control both speech and industry—the one quite as rigorously as the other. Again, if you will name the country which in time of peace most thoroughly

regulates business and industry, you will name also the country which most rigorously regulates speech.

These may be mere coincidences, but they are so numerous as to create a presumption that the nation that definitely abandons a *laissez-faire* policy with respect to one branch of human activity is not likely to preserve it with respect to all others. Talkers may, of course, easily invent reasons for placing the business of talking in a different category from other businesses. I could state a dozen such reasons myself, and an equal number to the contrary. But the practical statesman and man of affairs, whatever he may have said in a political campaign, is singularly indifferent to these theoretical distinctions when he faces a real situation.

Please do not understand this as an argument for a *laissez-faire* policy with respect to production, consumption, or speech. It is as much against as for such a policy. The important point is that whatever policy is pursued with respect to one is likely also to be pursued with respect to the others. We are already beginning to hear about the changed attitude of governments toward industry brought about by the war in Europe. Some are speculating as to the results of this changed attitude after the war is over. Let us not close our eyes to the fact that the change in the attitude of those governments toward consumption, toward speech, and toward everything else which affects the national well-being is quite as great and quite as striking as the change in their attitude toward industry. They have found that vicious habits of consumption and hostile expressions of opinion are quite as dangerous to the well-being of the nation as bad business methods. When we begin to think in terms of nationality we shall all discover the same thing.

The statement that one function of government is to protect the weak against the strong is another product of the particularist point of view. Since most of us are weak rather than strong, we doubtless feel that we should get more individual advantage from a government which followed that rule than from one which did not. Even those who occupy a middle position between the weak and the strong feel that they have more to fear from the strong than from the weak; therefore they would be inclined, if they sought their own advantage, to cast in their lot with the weak. But if we are thinking not primarily how much profit we of this generation can get from the government, but how the nation may grow strong and endure, it would seem rather absurd, would it not, to protect the weak against the strong? To protect

weakness against strength is to favor weakness and bid it multiply and replenish the nation. That is one way of building a weak nation. It would obviously be better to protect strength against weakness. As a matter of fact, that comes more nearly being the policy of any country worth living in than the opposite. Criminals are weak rather than strong. Somewhere between thirty and fifty per cent of them are feeble minded. It is found economical to protect strength against that kind of weakness at least.

However, the aim of the nation-builder should be neither to protect weakness against strength, nor primarily to protect strength against weakness. The obvious thing to do is to protect production against predation, usefulness against harmfulness, virtue against vice. Whether the predacious act is performed by a strong or a weak individual does not matter. It must be repressed in either case. Whether the productive act be performed by a weak or a strong individual does not matter; it must be protected in either case. Only thus can the nation grow strong, prosperous, and fit to survive in the stern rivalry, economic or military, among national groups.

One of the widest of these divergences of economic opinion, depending upon the point of approach, is found in the answers to the question as to how wealth ought to be distributed. From the point of view of those who are interested primarily in consumers' satisfactions, especially in the satisfactions of those consumers who are now living and possessed of voices with which to clamor for their share, there is much to be said in favor of some approach to equality of possessions. The weak producers probably have on the average as much capacity for consumers' enjoyment as the strong producers. Certainly no very satisfactory argument to the contrary has yet been presented. If the maximum of consumers' satisfaction is the object to be sought, the weight of the argument is in favor of some approach to equality. It is demonstrated that among people with equal capacity for enjoyment equality of consumption yields the maximum satisfaction. It is true that some concession would have to be made in favor of the strong producer provided it were found that he would not put forth his maximum effort unless he received special rewards. Unless the strong producers did put forth their best efforts at production, there would be fewer consumers' goods and consequently less consumers' satisfactions. It would therefore be necessary to allow the strong producers just enough in the way of special rewards

to induce them to use their powers. Aside from such considerations, the weight of the argument is in favor of some form of communism.

From the point of view, however, of those who are primarily interested in nation-building, the weight of the argument is in favor of distributing wealth in proportion to productive power, regardless of ability to consume joyfully. In the first place, they who have shown the ability to accumulate capital by consuming less than their income are to be considered better guardians of that accumulation than they who have not shown such capacity or willingness. If it were turned over to those who have been in the habit of consuming all they had, there would be a strong probability that they would consume it and not conserve it. In the long run, it is pretty certain that the nation which accumulates capital most rapidly is the nation which grows most rapidly in property and power. It is a rather noticeable fact that even laborers tend to leave those countries where capital does not accumulate and seek those countries where it does accumulate. So likewise do scholars, writers, and talkers.

Again, to invest capital is to direct the productive power of the community. They who direct that productive power wisely, that is, they who invest in such a way as to make it yield a large product, are economizing the productive power of the community. On the other hand, they who misdirect that power, who invest unwisely, who direct productive power in channels where it is not needed—in such a way as to produce less than is used up in the process—are wasting the productive power of the community. It is much better for the nation that the accumulations of capital be invested by those who can do it wisely and productively than that these accumulations should be invested by wasters, that is, by those who invest them where capital is not needed or in ways which use up more than is produced. In the long run, it is safe to say that the country which manages to put its accumulated capital under the control of the wisest investors is the country which will grow most rapidly in prosperity and power. To such a country even laborers will desire to migrate, and so also will scholars, writers, and talkers. In other words, it is better for all of us, in the long run, that accumulated capital should be distributed in proportion to investing ability than that it should be distributed in proportion to the power of graceful, elegant, or even jovial consumption. "To each according to his ability to

use productively, to manage, or to invest," should be the slogan rather than "to each according to his needs."

If I have succeeded in making it clear that it makes a difference with our conclusions on many questions of economic theory and policy whether we start from the national or from the particularist point of view, my next purpose is to plead for the national point of view. This point of view is especially needed at the present time because so many weighty opinions are being expressed against it. Tolstoi pronounced patriotism to be a vice. One of the leading moralists of the country has said that nationalism is one of his pet abominations, having in mind the situation in Europe at the present time. It is doubtless wrong for a people to make war under the stimulus of national arrogance; but his philosophy would make it equally wrong for a nation to fight to defend its territory or even its existence against the attacks of national arrogance. It may be said, in behalf of his consistency, that the moralist just quoted accepts the latter proposition along with the former. National existence is not worth fighting for under his theory. From that point of view, Horace Greely's advice regarding the secession movement was profoundly wise, "Let the erring sisters depart in peace." There were many in those days to whom national unity did not seem worth fighting for, and who opposed the war on that ground. From the particularist point of view it would be a little difficult to state what class in the North had a definite economic interest in the question, or how the non-slave owning majority in the South had anything at stake. Neither the laboring classes nor the business and professional classes were in visible danger of having their incomes reduced. All classes then living could, so far as any one has ever been able to show, have consumed as much had the country split up as if it remained united. The only class that might have suffered economically was the government officials. They would have ruled over a smaller country, and the salaries might conceivably have been smaller, though even this is by no means certain. To be sure, there were certain large but vague questions regarding the distant future which may have weighed heavily on the minds of men. Had the country split then, it was difficult to see where the particularist tendency would end. The possibility that at some distant day their descendants would suffer from the weakness of a divided country may have had its influence; but such considerations do not have much weight except with those who have what

is called a national consciousness. There was barely enough of this to save the day against the indifference of the particularists of the North and the opposition of the secessionists of the South. The little flame of national sentiment had to be nursed and coaxed by the persuasive force and magnetic personality of the greatest of all popular leaders.

A distinguished sentimentalist, who can scarcely be dignified by the name of moralist, has recently said before a large body of laboring men in New York that even in case of a military invasion of this country the laboring men would have no interest at stake and no motive for supporting a defensive war. Quoting the *Communist Manifesto*, she exclaimed that the laboring men had "nothing to lose but their chains." Anyone who believes that believes that laboring men are swine, that they have no interest beyond a full belly and a short working day,—that they have no souls. I refuse to believe it.

If one begins the inquiry as to how incomes and dinner-pails would be affected by foreign domination, why stop with the laboring men? They certainly have as much to lose as any other class. Suppose that we were to submit quietly to foreign occupancy, and the taking over of the government at Washington by a foreign power, who among us would suffer any diminution of income or of consumers' satisfactions? It is unlikely that our business men would suffer as a class. In fact, there is no foreign government which is strong enough to attempt a conquest which does not treat business men quite as well as our government, which does not protect life and property and repress mob violence rather more effectively than our government is in the habit of doing.

Again, so far as the economic self-interest of those now before me is concerned, it is difficult to see how you as a class would be economically injured if another government sent an army and took possession of our capital and ran its machinery. In any country which is strong enough to attempt such a thing, scholarship stands higher, and scholars are better treated, than in this country. If you have no interest beyond your own incomes and consumers' satisfactions, why should any of you bestir yourselves to repel an invasion? And yet, with this argument fully in mind, I venture to say that at least ninety-nine out of a hundred, even of your class, would bestir themselves and make considerable sacrifices to prevent such a thing from happening. The hundredth, if there be one, would be about as popular as a copperhead was in the North

at the end of the Civil War. The ninety and nine would be tempted to classify him as a white-livered scoundrel. While the idea might be correct, the nomenclature would not be strictly scientific. It would be better to call him the kind of philosopher to whom nationality is a pet abomination.

There is, however, one small class who alone would lose heavily by a foreign conquest. This class is made up of sundry gentlemen in Washington and various other capitals now holding jobs and receiving salaries which, though not large, are as a rule larger than those same gentlemen could earn elsewhere. They would most certainly be turned adrift and their places filled by representatives of the conquering power. If nobody cared except they who had something to lose in the way of income, these gentlemen would naturally be most vitally interested. They who think and talk only in terms of full dinner-pails and easy hours would doubtless say that these gentlemen were merely afraid of losing their jobs.

But should the rest of us care? We should. We do not look cynically upon those gentlemen merely as the holders of easy jobs and the receivers of fat salaries, though their jobs and their incomes do undoubtedly mean as much to them as ours do to us. We look upon them rather as trustees of our national interests and the agents for the carrying out of our national aspirations.

The sentiment of nationality is as real as hunger, thirst, or family affection, and like them it supplies us with a motive which impels us to a proper functioning. Indeed, there is a pretty close parallelism between family sentiment and national sentiment as a motive for functioning. To one who possesses neither it would appear rather stupid to deprive one's self of consumers' satisfactions merely to provide means for the support of a family. A man whose interests do not extend beyond a full belly and a short working day would see no reason why he should sacrifice these interests merely in order that his species might survive. The number of men who desert their families and the larger number who have no families at all, are proof that there are considerable numbers who reason that way. There may be some moral philosophers among them to whom family sentiment is a pet abomination. Why should not a sentimentalist of the same shallow type as the one referred to above advise all such men not to sacrifice anything for such an absurd sentiment as family affection, telling them that they have "nothing to lose but their chains."

However, it would probably not be very difficult to convince the average audience that family affection really has a place in the economy of nature. It seems to supply a motive which leads men to do what would, without it, be contrary to their individual or particular interests, in favor of the interest of the species. The future members of our race have a vital interest in what we do, but they have no voice to persuade us, or bribe to offer us. They have, nevertheless, an advocate with us, to appeal powerfully to our wills to persuade us to do what is necessary for their salvation. That persuasive advocate is domesticity.

It seems to have been pretty well demonstrated that the human race succeeds better when it hunts in packs or works in groups than when it hunts or works as individuals. In the long run, the well-being of the species seems to depend about as definitely upon the existence of some large group, variously called state or nation, as upon the small group called the family. Without a sentiment of nationality it would be about as difficult to preserve the larger group as it would be to preserve the smaller group without a sentiment of domesticity. They who lack national sentiment find it as difficult to frame arguments in favor of sacrificing individual for national interests as they who lack family sentiment find it to frame arguments in favor of sacrificing individual for family interests. In neither case do men find themselves wise enough or virtuous enough to safeguard the future interests of mankind. Lacking these sentiments, they build only as well as they know; possessing them, they build better than they know.

Even though we possess the family sentiment, few of us are wise enough to plan as wisely for our descendants three generations in the future as we do for ourselves. None of us is wise enough to plan for those who are to live a hundred, or even ten, generations hence. The feebleness and shortsightedness of the intellect is here supplemented by the generous sentiment of nationality. It is through this sentiment that we are led, "as by an invisible hand," to safeguard the interests of that vast majority which never votes for the excellent reason that it is not born yet. Without this sentiment we should each of us join in the query, What has posterity ever done for me that I should do anything for posterity? Self-interest, even when widened so as to include one's own immediate flesh and blood, will not lead us to safeguard the interests of that vast unborn majority. The sentiment of nationality, the love of country, pride in its growth and prosperity, the desire

to see it grow and hold an honorable place among the nations of the earth, these are the salvation of those voiceless generations whose prosperity and happiness for centuries to come depend upon what we do here and now.

It must be admitted, however, that there are perversions of the national sentiment as there are perversions of hunger, thirst, and sex. But it ought not to be difficult to distinguish between the perversion of an instinct and the instinct itself. "Does not war proceed from national sentiment?" is sometimes asked by the men and women who have forgotten, if they ever knew, that wars were more frequent and more continuous before such a thing as nationality or national sentiment existed than they are now. It is probably true, however, that when it does come, a war between highly organized and powerful nations is more terrific than one between weak and disorganized hordes with little national consciousness. If a powerful national sentiment is a factor in building a powerful and prosperous nation, and such a nation is therefore capable of carrying on a terrific war, there may then be said to be a connection between a strong national sentiment and the terrific character of a modern war. But shall we surrender the power and prosperity which come from a compact and well organized national life, and grow weak and unprosperous, merely in order that we may not be able to wage war on such a scale and with such destructiveness as that which the world is now witnessing? Before a war can be carried on on a vast scale there must be vast power and resources, both in men and the products of the mind. Before it can be very destructive there must be something to destroy as well as something to be used in destruction. To propose to divest humanity of all national sentiment in order to save it from the havoc of war is about as reasonable as to divest it of appetite in order to save it from the perversions of appetite.

"Where there is no vision, the people perish." This is said to be a bad translation. "Where there is no vision the people become disorganized, or throw off restraint," is said to be more accurate, but it may mean much the same thing. If they become disorganized, if they throw off restraint, if they will not subject themselves to discipline, they will grow weak. In the eternal process of trial and rejection, of survival and extinction, by which every step in progress thus far in this unfinished world has come about, weakness means death. This applies not to plant and animal forms alone, but to social institutions, moral systems,

forms of government, tribes and nations of men as well. Can democracy discipline itself and fit itself to meet this test? If not, democracy can no more survive than could any of the other thousand and one organisms that have become extinct through their inability to meet the conditions. The world has always been ruled by the disciplined nations, and unless there is a complete reversal of the process, it will be ruled by them to the end of time. If democrats can discipline themselves as well as rulers can discipline their subjects, then democracy may survive; otherwise not.

There is no motive known to any student which will compel a whole democracy to discipline itself, except a powerful national sentiment. The individuals must all, with one accord, care and care intensely for the same thing. This and this alone will enable each person to subject his interests to the good of the whole, and the lesser interest of the present to the larger interest of the future. Only they to whom Webster's words on Union and Liberty meant something for which they cared considerably were prepared to hazard their lives for that something. Only they who, like Milton, see in their minds "a great and puissant nation," have the vision which keeps men from becoming demoralized, from throwing off restraint, from becoming undisciplined. Without this endurance of restraint—without this self-discipline—the people perish.

LANDED PROPERTY AS AN ECONOMIC CONCEPT AND AS A FIELD OF RESEARCH

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We are face to face with the gravest economic problems arising out of landed property; and when we turn to economic treatises we find little to help us in their solution. These problems lie at the very foundation of our economic life, and yet we economists, who should see a little farther ahead than others and a little more clearly, seem strangely unconcerned. It has been generally supposed by thinkers that private property in land has been a bulwark of political liberty, because—so the argument runs—it has developed a strong class of men who have loved liberty and at the same time it has given them a firm foundation upon which they could stand in successful opposition to tyranny. Land, privately owned, is security for loans in the United States which aggregate billions of dollars and which supply lifeblood to our industries. Private property in land is the foundation of the building and loan associations of this country which probably are furnishing more people with homes of their own than any other single agency. It is generally believed that these homes give their owners a socially precious stake in the community and that they are a powerful force in making their owners good citizens. In other ways land, privately owned, increases the number of home-owners. Proceeding individually without the aid of building and loan associations, we find in every nook and corner of our land men and women, young and old, using land as an aid in securing homes of their own and improving their economic position. The young man who buys a building site, gradually pays for it, borrows money upon the site as security, builds a home and then gradually pays for it and, at the same time, develops a firm character, is typical in our country. While there may be here and there a city like New York where conditions are very unusual and where this young man is not typical, he is so generally. In villages and smaller cities certainly observation would indicate that this man is a type of those who are acquiring a competency. Land is a kind of investment open to all, to workingmen, to professional men and to women. It involves less that is hidden and mysterious than perhaps any other kind of investment that could be named. It encourages saving above all other kinds of property.

Landed property affords joy to those who acquire it. What satisfaction does the married couple take in the farm or home at last all paid for! What pleasure in looking back on the road which has been traveled step by step, even if some of the steps have involved painful self-sacrifice! The world over the goal stimulates and encourages effort in reaching it. Typical is the description of the Rumanian peasants in a recent article: "They are frugal and sober. The one great dream each cherishes is to possess the ground he tills and call it his own."

Landed property is bound up inextricably with philanthropic endowments of all kinds. Our colleges and universities, our hospitals, our institutions of research have their property largely invested in land directly, or indirectly through securities which rest upon land as their basis.

Now I have not intended to make an argument for landed property. I have described things as they are. I have given certain aspects of landed property only; and present arrangements may conceivably all be changed and that to the advantage of society; but surely it should not be done without careful, scientific investigation. Money is being spent by the hundreds of thousands to destroy landed property by taking away its value, that is to say, by taking the meat out of the nut and leaving only the empty shell. If the value goes, property in the economic sense disappears and our courts rightly hold that to take value destroys property in the legal sense also. While this agitation against landed property is going on next to nothing is being spent for investigation.

Thomas Arnold once said, "A faulty political economy is the fruitful parent of crime." However that may be, a faulty political economy is a cause of disaster-spreading, misery-producing mistakes in practical affairs, and this is illustrated by the imperfection of our methods in dealing with land.

Economic theory has at previous meetings of this Association been presented as in a sad condition with us. We have been moved by eloquent lamentations on account of our failure to make progress in theory. But I fear we have had a false idea of theory; or, if I may use such an expression, we have had an unscientific theory of theory. We have been seeking easy explanation and simple generalizations where in the nature of the case they cannot exist. We seek in a theory of rent one general principle which will solve our land problems. We hear even of a theory of distribution. But such a theory of rent is an impossibility, and still less

is it possible to find a theory of distribution. Sometimes I fear we come dangerously near the position of the medical quack who has his panacea for all the ills of our body. Our life is complex and daily increases in complexity. No one explanation of our life can be adequate; no one theory can do more than help a little bit or perhaps sometimes a big bit. Many theories are required to explain any large part of our economic life and every method must be employed to aid us in our comprehension of scientific truth and in the discovery of practical measures.

The founders of our science, when life was comparably simple, gave us certain very helpful theories which were a good beginning; but we have often treated their work as an end rather than a beginning.

We should now clearly recognize that theory in the old sense belongs to the past and the search for it is like the search for the elixir of life. No simple deductive processes can ever terminate in easy and adequate theoretical explanations of economic life which will furnish solutions of practical problems. Let us suppose that some one comes forward with a theory of your individual life, which at the same time explains it and gives guidance for your life problems. What do you think of him? You waste no time in refuting him. It is not worth while to listen, after you once understand he is offering a panacea. Yet in the infinitely greater complexity of social life, into which flow millions of individual lives, people still pay attention to men who in a single pamphlet deduce conclusions based on assumed natural laws that offer us formulas for the solution of the greatest economic problems of our time.

The economists have very generally talked about land as if it were one simple thing, and that thing a combination of natural forces, offering to men productive powers unequal in excellence and so limited as to all the better offerings that a price is paid for their use. Land has been regarded as a factor in production and a producer of rent. It has been regarded as a unity. Search your Adam Smith, your Ricardo, your John Stuart Mill and even Marshall, and you will find land regarded simply as land; although Marshall does make progress in recognizing the complexity of rights in the sense that land values may have many different owners.

But what can we as a matter of fact say about land as land? Very little. We begin to make progress only as we classify land,

and it is the attempt to reach generalizations for land as land which has led us into scientific error and mistaken policies. What can we say about land as land? Shall we say that it should be privately owned? That is contradicted by the experience of the world? It would lead to despotism without parallel. Shall we say that land should be publicly owned? For some kinds of land, private ownership has, the world over, produced by far the better results. Shall we say that land ought to be property at all? The vast bodies of water on the earth are free goods and not property, and the world will never consent to their becoming property. It is difficult to make many generalizations that apply to land simply as land. Economists have often said that common property in land belongs to the past; and that we must solve the problem of the North American Indian by getting away from it. Possibly the conclusion may be correct, so far as the Indian is concerned, possibly incorrect; but the generalization is over-hasty for to a limited extent it is revived as a part of the most modern land reform in Ireland. And in Wyoming we find a commission including that high authority, Professor Elwood Mead, with his rich experience, recommending as a part of his plans for the development of agriculture in that arid region, that the grazing land on the public range should not be allowed to become private property, but public property regulated with reference to certain specific ends to be accomplished. Such regulation is to mean a return to common grazing rights, somewhat like those on the common fields of England; but to use the English phrase, the rights must be "stinted," not "unstinted." Therefore, stinted common rights are advocated as a part of twentieth century land reform.

Property in general means exclusive control vested in some person or legal entity, private or public. Landed property means exclusive control lodged somewhere with respect to land. The desirable control must necessarily vary with the nature of the thing or things to be controlled. Now land exists in very great variety and an adequate definition of land must bring out this variety. We shall do well to seek the help of our law books, because dealing with land in the concrete the law cannot avoid noticing the complexity of forces embraced in land.

Let us turn to Tiedeman's *Real Property* for a legal definition of land. "Land," writes Tiedeman, "is the soil of the earth, and includes everything erected upon its surface, or which is buried

beneath it. It extends in theory indefinitely upward, *usque ad coelum*, and downward, *usque ad orcum*. Under the term *land*, therefore, are included the buildings, made so under the doctrine of accession, and the trees and other things growing upon the land, under the doctrine of acquisition by production, as well as the minerals which may be embedded in the earth. If water runs over the land, the ownership of the land gives a right to the use of the water, but does not create therein a permanent right of property. The property consists in the use.¹

Let us add what the same author says about the elements composing land, in order to give a fuller idea of the contents of this legal concept: "The term 'land,' in its broadest sense, includes not only all substances comprising part of the solid body of the earth, but all fluids and gases, metallic and non-metallic substances, located beneath the surface of the soil, as well as the soil and subsoil upon and immediately beneath the surface of the earth, and the erections on the surface, of a permanent and fixed character. The solid, crystalline bodies, forming part of the substance of the earth, and the liquids and gases, which do not possess a definite geometric form, that are put to commercial uses, because of their value to mankind, are generally denominated 'minerals,' to distinguish them from the soil and subsoil and other elements of the term 'land' possessing no peculiar value."²

Economists have given little attention to definitions of land, offhand assertion of its equivalence to forces of nature having generally sufficed. Nevertheless by implication economics carries its analysis in some respects further than the legal definition cited, for it restricts land in its narrowest sense to nature and her works, and adds on to those gifts of nature such products of man as become indistinguishably blended with the land. The thought of the economist has been the distinction between the gifts of nature and the products of man's toil. The economist would then call the house, the barn, capital—things produced by man aided by nature—and would exclude these from land. On the other hand, the economic idea is in harmony with the legal concept in including minerals, fluids, and gases; and it looks upon water as a part of land, regardless of its ownership. Also we may notice that to an increasing extent land as treated in law for many purposes follows the economic analysis, for example, in taxation.

¹ Tiedeman, *Real Property*, § 2.

² *Ibid.*, § 3.

As already stated, the economist often uses the term natural agents as the equivalent of land. This generally accepted economic idea of land finds adequate expression in these words of Professor Alfred Marshall: "By land is meant the material and the forces which nature gives freely for man's aid, in land and water, in air and light and heat."³

As land embraces so many different materials and forces, it can be resolved into elements both for scientific treatment and for legal ownership. This Tiedeman points out very clearly in these words: "Formerly, when one owned the surface of the earth, he was held, in law, to own an estate which extended to the center of the earth, but now the surface of the land may be separated, by a distinct title, from the different strata underneath it and there may be as many owners as there are strata. Not only may there be separate titles to the elements that compose the soil, but there may be distinct ownership in the different descriptions of minerals, or in different deposits or strata of the same kind of mineral. For instance, one person may own the iron ore and another the lead, contained in the same tract of land, and a third party can own one section or stratum of coal and a fourth hold the title to another distinct seam of the same mineral, while neither may possess the title to the surface of the land."⁴

Now as land includes so many kinds of forces and materials, it would seem that the form of control suitable for one kind of land or forces and materials of one sort would not be suitable for another sort; and that consequently we must classify land. Such is the case, and classification of land is the first step in any satisfactory treatment of land after we have some preliminary idea of what land and property signify as legal and economic concepts.

The varieties in land are so great as to render it out of the question to give in brief compass an adequate classification. Notice the word used is adequate, not complete, for so many and varied are the uses of land that it is impossible to make a complete classification of land varieties of a great nation, still less of the world. But a classification which is adequate for most theoretical and practical purposes, we may designate as adequate or "sufficient," taking the last designation from Wakefield, who made so much of his "sufficient price" for land; neglecting however, to accompany the *sufficient price* with the *sufficient classification*. But what is a sufficient classification at one time is insufficient at

³ Marshall, *Principles of Economics* (5th ed.), Bk. IV, Ch. I, § 1, p. 138

⁴ Tiedeman, *Real Property*, § 6.

another. In fact, we may lay it down as a general law that *the higher the stage of economic evolution and the more intensive the utilization of land, the more highly developed must be the classification of land, if it is to be a sufficient classification.* Now landed property as an economic concept must be large enough to make provision for all the varieties of land; in other words, it must be a very complex concept. If the definition itself does not suggest the great number of separate things embraced in it, explanation accompanying the definition should bring this out.

The second part of this paper deals with land as a field of research, and this must be preceded by classification, for every kind of land has its own problems for research; and, so far as research is concerned, to use an appropriate figure, we have scarcely scratched the ground.

It has been stated that comparatively little can be said about land as land. This has special application to land policies, and is true as a broad general statement. Nevertheless, the discussions of economists enable us to formulate generalizations of significance concerning land as a great economic category, alongside of capital, labor, and enterprise. As a beginning of a treatment of landed property, we must direct our attention to the peculiarities of land, especially as contrasted with capital goods; or, to avoid any controversy with some of my friends at this point, let us say other capital goods. Here we consider the original gifts of nature, their unequal distribution, their limitations both with respect to quality and quantity, the immobility of land, its relative and in some respects even its absolute permanence, etc. All this is omitted from further discussion here and now, as it is familiar ground.

It cannot be said that land has been absolutely without classification in the United States. Some distinction has always been made between mineral land and other lands, and our fundamental law has excluded from private ownership navigable waters.

In 1878 Major J. W. Powell, as Geologist in Charge of the United States Geographical and Geological Survey of the Rocky Mountain Region, made a valuable, perhaps it may almost be said epoch-making, "Report on the Lands of the Arid Region of the United States." In this report Major Powell made a broad distinction between the land of the arid region and the land of the humid region, setting the limit roughly at twenty inches of rainfall but calling attention to the fact that we must consider the distribution of the rainfall as well as its amount. He at-

tempts no classification of the lands of the humid region, but divides the lands of the arid region into irrigable lands, timber lands, and pasture lands.

President Van Hise in his book on the *Conservation of Natural Resources* divides land into three classes, basing his classification upon those characteristics which naturally attract the attention of the geologist. His classes are:

1. Areas of crystalline and sedimentary rocks
2. Plains, plateaus, and mountains
3. Areas classified with reference to the covering which was originally upon them

By a combination of these factors of rock, elevation, and covering, he divides the lands of the United States into eight provinces:

1. The Atlantic and Gulf Plains
2. The Eastern Ancient Plateaus
3. The Appalachian Ranges, Allegheny Plateaus, and Ozarks
4. The Lake Plains
5. The Prairie Plains
6. The Great Plains
7. The Rocky Mountain and Western Plateaus
8. The Pacific Region

But as we have not now time to enter into a discussion of this classification and other classifications, I proceed at once with a classification which aims to meet the needs of economic discussion and of the legislator in our own day. I offer the following classification, hoping that by suggestion and criticism it may be improved. Please recall, however, what I have already said about classification, that no classification can be complete. I am aiming at the "sufficient" classification for the beginning of the twentieth century, and although it has particular reference to the United States, it will, I believe, be found generally applicable to all great nations.

A. Classification with Respect to the Water-Supply

Taking the world as a whole this is doubtless the most important of all classifications.

I. Land of the arid region

1. Irrigable land
2. Timber land
3. Pasture land
4. Dry-farming land

This is the classification of Major Powell with dry-farming land added; and each one of these classes is capable of subclassification; and further subclassification is required as a necessary step in the framing of land policies.

- II. Lands watered in the main and with approximate adequacy by rainfall, artificial watering playing a subordinate rôle. These are lands of the humid region.

The following classification under *B* and *C* is framed mainly with reference to lands of the humid region; but not exclusively so, as it will be seen that it is in part applicable to lands of the arid region. The other classifications likewise are made from different points of view and apply very largely to both land regions.

- B.* I. Dead land
- II. Living land

- C.* I. Land for sub-surface appropriation of natural gifts. We have here to do with mines.

- II. Land for surface appropriation or utilization
 - 1. Land for appropriation of natural gifts
 - a. Natural forests
 - b. Natural pastures
 - c. Land with surface minerals, or placer-deposits
 - 2. Cultivated land
 - a. Agrarian landed property
 - b. Cultivated artificial forests
 - 3. Building sites
 - 4. Highways
 - a. Of general use
 - b. Of limited use
 - 5. Shore lands, including riparian rights
 - 6. Land under water
 - 7. Water
 - a. Running streams, brooks, rivers
 - b. Bodies of water without a strong current—ponds, lakes, seas, oceans, etc.

Another classification of water is into

- a. Tidal waters
- b. Non-tidal waters

D. I. Urban land

This needs extensive classification in order to frame wise urban land policies. A rough classification is as follows:

1. Land used for mercantile purposes which is further subdivided into
 - a. Wholesale districts
 - b. Retail districts
2. Manufacturing sections
3. Dwelling zones which must be again subdivided with reference to the character of improvement
4. Recreation land

II. Rural land

This has already been sufficiently classified for present purposes.

E. I. Land which indirectly ministers to man through material products, for example, agricultural land

II. Land which directly serves man's needs

1. Wild recreation land, for example, land which may be taken for such use from the government in Ontario, Canada, and privately owned. But much land of this land is publicly owned also.
2. Artificial parks, privately or publicly owned
3. Home lands, surrounding houses and making a part of the home

F. *Classification with Respect to Actual and Desired Forms of Ownership*

I. Common ownership

II. Private ownership

1. Individual
2. Collective, for example, of corporations

III. Public ownership

G. *Classification with Respect to Excellence*

I. Land of the first class

II. Land of the second class, etc.

As population develops and utilization becomes more intensive, the quality classes should increase. In a country like the United States, there should be probably well over thirty quality classes. An advanced policy of limitation of private land ownership, as in

New Zealand, must be based on such a classification. In New Zealand the aim of land legislation is to limit the amount of arable land one person may own to four hundred acres of land of the first class. Obviously to limit area without reference to quality shows either heedlessness, as in the United States laws concerning homesteads, or it indicates the absence of common sense; and in either case the results are disastrous.

This classification, as well as all the others, implies a thorough-going economic survey; one of the biggest undertakings now to be placed before the American people; a measure essential to conservation, growth, and the formulation of land policies; a necessary condition, therefore, of our permanent prosperity.

We turn now to the second part of our paper, which deals with landed property as a field of research. We can take this up from various points of view. I have a list of over one hundred topics, each of which offers a field of research, and this list could be extended indefinitely. Some idea of the scope of the field of research is perhaps afforded by the rough classification of topics which I have made for the use of my own students.

I. Topics Connected with Terminology

These topics are largely theoretical, but they all have their practical bearing. Professor Fetter says with respect to the term rent: "A restricted meaning has long been applied by economists to the words, the income yielded by lands, etc. This was put in contrast with interest for money and capital, and with wages of labor. This meaning is now being abandoned by economic students."

The purpose of the investigation suggested by this topic is to ascertain the facts in our own and other countries, to show any evolutionary changes in usage in the term "rent" and to attempt to show the significance of the use of the term. Naturally the man in the market place, as well as the man of science, would be interrogated as to his use of the term.

The use of the term rent to indicate a privileged position is also a topic worthy of investigation and one which comes under terminology.

II. Problems of an Historical Nature

These topics can be further subdivided into:

1. Those that relate to actual historical evolution, for example, the order of utilization of the various grades of land; also topics

which relate to the historical development of land policies in different countries, for example, England, Germany. Here one naturally thinks of the work of Stein and Hardenberg in Germany.

2. Topics relating to the history of theories, for example, this topic: How much in the theory of rent as stated by Adam Smith has stood the test of experience?

III. Other Theoretical Questions

Here we have to do with such topics as custom and competition and their influence on the rent and price of land, the law of diminishing returns, agricultural rent, and marginal land.

IV. Conservation Topics

Some work has been done in this field, but after all little as compared with what needs to be done. We have under conservation such topics as these: To what extent is there a conflict of interest between the private owner of land and society when we consider landed property from the point of view of conservation? And the remedy? and, To what extent do the interests of present and future generations conflict in conservation policies?

V. Socialization of Land

Socialization means making the land subserve social purposes to an increasing extent. This can be done through public ownership, and public ownership may be that of a nation, state, city, etc.

Socialism proposes one plan for a complete socialization, and Henry George in his single tax recommends another method of socialization. The topic, How shall we combine public and private ownership in order best to socialize the land? suggests a very large field of research.

Henry George and his followers talk much about bringing the land into use or "opening up the land." It is well worth while to investigate "unused natural resources," and attempt to develop a theory of unused land. How much land, after all, is unused and where is it? This should be considered with reference to older countries like Ireland and Germany, as well as new countries like the United States and Australia. For what is the unused land being held and in how many cases is it being held for better use than its possible present use? How can we use the land in cities which is not built upon? What are the various methods of preventing an undue spreading-out of cities? These are some of the questions which suggest themselves in connection with land withheld from use or only partially used.

Socialization of land does not mean altogether public ownership, for privately owned land may also be socialized; and, indeed, there are various forces in civilization which by logical social processes tend to socialize increasingly privately-owned land, as well as private wealth in general.

VI. Taxation of Land and Other Public Revenues from Land

This main classification of topics suggests many different lines of research. Excess condemnation is one, the complete or partial exemption of improvement on land from taxation suggests another. Another topic is this: To what extent and under what circumstances is it desirable in cities to exempt land from taxation in order to encourage owners to keep the land open and prevent overcrowding?

VII. Relation of Land to the Human Element

Here we have many topics in our field of research which have been very inadequately treated. One such topic is "Agricultural Labor." How shall we secure an adequate supply of agricultural labor, and how shall we render the lot of the agricultural laborer a desirable one? The tenant in country and city suggests relationships which need investigation. We need what is called the agricultural ladder. What are the different rungs on this ladder, and how is the ascent to be made from one to the other?

VIII. Substitutes for Free Land

We know how large a rôle free land has played in the development of the United States. Free land is disappearing. What substitutes can be devised to take the place of free land? Free land has served as an option to countless thousands in the United States and has given us a high margin of economic production. But it is quite possible for society to provide opportunities, even better than those which free land has afforded in the past.

IX. Contemporary Land Policies, Actual and Proposed

Doubtless it would be easy to mention forty or fifty topics which would come under this general head. One of the chief of these relates to the means which have in view ease of acquisition of land. How shall we open up the land to widespread ownership? Naturally we think of the use of government credit, of land banks in other countries, and the new land banks in this country. One very practical problem is found in the investigation of various

measures to increase joint ownership in great cities where land is so expensive that the ordinary man is unable to own a house and lot. Units of ownership in apartment houses have been tried to a very limited extent.

The great work which is being done in countries like Russia, New Zealand, and Ireland has received some attention, but has never been adequately investigated. It is very interesting and instructive in New Zealand to examine the way one land policy has followed another until the freehold has become dominant and is apparently destined to replace public ownership with leaseholds. The limitation of land ownership and progressive taxation in New Zealand are likewise as interesting as they are instructive.

The land reforms of Ireland afford as fascinating a field of investigation as any which could be named. We observe there one land policy following another and all terminating in the limited freehold, the resting point appearing to have been reached when the man who cultivates the land has what is there called the economic holding, namely, land enough to support a family according to the received standard of life.

When we begin to investigate the actual progress of land reform in the countries named, we are impressed with the tremendous complexities of land problems. In each country measurable success has been attained, but it has been necessary to move along many different lines. In Ireland the mere survey of the land has been and is still an immense undertaking. Educational measures of many different kinds have been introduced to make the land reform a success. Coöperation under the leadership of Sir Horace Plunkett is playing its part to improve the lot of the farmer. Industries have been and are being encouraged. The problem is complex because life is complex, and when we get seriously into the task of solving our land problems we forget all about the simple formulas and panaceas. I do not recall, for example, having heard the single tax mentioned while I was studying the land problems in Ireland.

I want to lay down a few theses, not as proved generalizations, but as generalizations to be tested by research.

Thesis I. The desire to find wealth rather than to create it belongs to an early exploitative stage of development. People want in a new country to strike oil, or to find gold, and there is great danger of demoralization. We see this demoralization in the United States in the attempt of social reformers to seek and

seize some already accumulated wealth. We live in the psychical stage of exploitation affecting alike private and public life. We look for some wealth to seize instead of searching for methods of bringing in reform by orderly processes of law. If it is proposed to have government ownership of telegraphs and telephones, we have among us a class of people who desire to make a bargain for society by paying less for the property than it is really worth. Let us contrast the conditions in an older country, and take France as a type. As a recent writer tells us, "France has been worked over so long that wealth is only acquired by industry and thrift. No Frenchman has ever discovered gold in his backyard; none hopes to. We rely overmuch on such luck."⁶ Does this not explain Henry George's proposal to take away land values without compensation? Contrast Henry George in this particular with Alfred Russel Wallace who wanted to nationalize the land but with compensation. Consider also the conservatism of the Fabian socialists in England with respect to the treatment of present owners.

As a matter of fact, by the use of existing agencies, accepted institutions, and laws, we may bring about any desired changes through orderly constitutional processes. Vested rights, economic justice, and social progress may all be harmonized.

Thesis II. In the development of land policies there is no resting point until the freehold is reached. This is proved by the history of land tenure in Russia, Ireland, New Zealand, and the United States.

Thesis III. When the freehold is reached, a remarkable development of the social side of private property begins to take place. The privately owned land is more and more socialized. We have considered some steps by which this socialization is taking place in New Zealand. Progressive taxation is likely to be developed and aesthetic purpose to be emphasized both in country and city.

Thesis IV. No permanent peace is obtained until most of the land is tilled by the man who owns it. The farm-owning cultivator must become dominant in the country, and home ownership in the city must be widespread to give us peace and prosperity.

Tenancy must always exist, but must not be dominant. Tenancy serves two main purposes: first, it serves as a rung on the

⁶ Arthur Bullard, "Our Relations with France." *Atlantic Monthly*, November, 1916, p. 637.

ladder upwards to ownership; second, it serves the purpose of those who in their own interest and in the interest of society should be tenants under wise direction rather than owners.

Thesis V. A large amount of public ownership of land both in city and in country is required. This is proved by world experience. Certain classes of land should be publicly owned, for example, forest land, mineral treasures, and shore lands. Research will show and give us some approximate idea of the desirable extent of public ownership and the kind of public administration which will render public ownership most fruitful.

Many other theses could be presented, but these will suffice for the present.

A large practical and scientific task has been outlined in this paper. There is no reason why all should not work at it, whatever their preconceived notions may be. If the single taxer is convinced that he has the truth, he will encourage rather than discourage investigation and welcome all scientific discovery. After all, there are points of agreement and harmony in this paper with the single taxer. The present writer feels that we owe a debt of gratitude to Henry George. We need not speak about his devotion to the public good, about his integrity, about his sincerity of purpose; all of these have been abundantly recognized. I think Henry George is to be praised because he has brought forward the land problem as one of paramount importance. I agree with him that its solution is necessary for the salvation of society. It is the great economic problem of the twentieth century. Henry George has emphasized the economic surplus, even if he has seen only a small part of this surplus. This question of the surplus and the distinction between earned and unearned incomes is one which is not likely to disappear from discussion.

The great practical measure now needed is a complete economic survey of the land. This will require the widest coöperation. It affords a field for the national government, for the states, and for the private investigator working upon the basis of endowment. I could not think of a better use to which to turn an endowment fund for research than to the particular field of research which in this paper has engaged our attention.

LANDED PROPERTY AS AN ECONOMIC CONCEPT AND AS A FIELD FOR RESEARCH—DISCUSSION

FRANK A. FETTER.—With the larger purpose of Professor Ely's valuable paper, I am in entire agreement. I would reserve judgment on a few of the minor statements, and I would express dissent on only one perhaps not very important point. The title appears to be somewhat of a misnomer. Landed property is not an economic concept, but a juristic one. The various classes of land mentioned in the paper are partly physical, partly technological, partly juristic, and only in small part economic. Of course the geological, topographical, and chemical qualities of soil, all have economic bearings, but primarily such classifications are not economic. It would, of course, be possible to correct or adjust this terminology without affecting the main purposes of the leading paper.

The two main aspects of the paper are the theoretical concept of land and the social policy of land tenure. The latter is perhaps more interesting but I will leave that to be discussed by the agricultural economists who are to follow me, and shall limit my discussion to the theoretical aspect of the question.

The largest theoretical proposition presented, the great truth, is that land as an economic category is not simple or unified. It never has been, is not now, and cannot be, a truly scientific concept. Science only in its cruder stages has to do with the classification of concrete objects. As the truly scientific stage is reached, the concern of the thinker is with the qualities and aspects of things, rather than with the concrete objects themselves.

Consider the different things that are called land. The concept land includes nearly all of our material environment. What common character have a tract of desert sand, an Iowa farm, a forest, an iron mine, a coal mine, a mountain side, attractive for residence because of the beautiful scenery, a waterfall, or a shore line suitable for docks and terminal facilities for railways? For what possible purpose could these different kinds of material things be grouped together into one logical economic category and contrasted with the economic agents? Ricardo from the first failed in his attempt to do so; his doctrine was limited to the use of soil for agriculture. He did not know what to do with the other kinds of land under his rent law. He took Adam Smith to task for using the expression "the rent of mines"; then he used that phrase as the heading of his own next chapter. He said

never a word about urban sites. We must recall that at that time the reason for the rent of land was assured to be the peculiar chemical qualities of the soil used for the production of food. The modern conception of a general principle of proportionality in the use of economic agents seems not to have been glimpsed. Professor Ely's discussion ably shows that there is no final resting point in the analysis of the land concept until we come to the concept of the separable uses of material things.

But it may be said that the distinction between land and capital by the older economists was not made with respect to the *purposes* for which agents of production were used, but with respect to their *origin*, their naturalness, or artificiality. Observe that the older grouping of concrete goods into land and capital was not a continuity classification of goods which have more or less of artificiality. Land and capital were sharply defined and contrasted. Those goods which were called natural were treated (or were supposed to be treated) under the land and rent concept, and those that were artificial were treated under the capital concept. The material of everything in the world was once "natural." When did it become "artificial"? At what moment did the bit of iron ore, the piece of coal, the piece of wood, the piece of "land," miraculously become capital? Was it at the first touch of man's hand? Then is every cultivated bit of land artificial, and by that token is capital? This difficulty was recognized by J. S. Mill and troubled him greatly. But at this point the answer is given that the iron ore becomes capital when it is removed from the land while the land surface remains. Here the reason assigned for distinguishing capital from land is changed from artificiality to transportability. We have not time to discuss this further as a theoretical question. It has been already sufficiently threshed out,¹ and there can be no doubt as to the verdict to be rendered.

No wonder then, that many economists have lost their faith in the old Ricardian theory of rent and the land concept. This accounts in large measure for the great dissatisfaction among many teachers with the status of economic theory. The Ricardian theory of distribution having broken down, the economists of the older school are left without any unifying philosophy of economics such as is given by a general theory of distribution.

The theoretical aspect and the social-policy aspect of the land ques-

¹ See the discussion on "The Relations between Rent and Interest," still significant, though now appearing in some respects undeveloped, at the New Orleans meeting, 1903, *Publications*, Third Series, Vol. V.

tion are closely connected in thought. At whichever end we begin to study land we find ourselves necessarily approaching, after a time, the other aspect. Professor Ely was primarily interested in the social reform aspects of the land question. He has done a service in pointing out that the crudity and lack of logic of the old land concept is one of the great obstacles in the way of a better understanding of the practical problems involved in legislation in respect to the subject of property in land.

E. DANA DURAND.—We are indebted to Professor Ely for emphasizing the great importance of the problems connected with landed property and for setting forth the complexity of those problems. He is quite right in maintaining that land comprises a great variety of types. His classification is highly suggestive and for practical purposes seems reasonably "sufficient," to use his phrase. Professor Ely has also performed a service in analyzing the field of research connected with land and landed property. It is to be hoped that economists will undertake far more exhaustive researches along the lines suggested than they have hitherto attempted.

It seems to me, however, that the leading economic characteristics of the principal classes of land are already pretty well understood. We are already in a position to see that our present public policy is unsatisfactory and to formulate at least roughly the outlines of a more desirable policy.

I shall confine my discussion to agricultural land, although I believe that much that is true of such land is true also of urban land, mineral land, water powers, and various other classes of land.

However man may have modified or improved agricultural land, it is still true that there is in much of it an important element which is a natural gift. The total area of land at all adapted to agriculture is limited. It varies greatly in its productive efficiency. If all land capable of agricultural use had to be used to support the population, it would all command a usance value or rent, independent of any human labor or capital embodied in it. As it is, the superior grades of land do command such a rent. This rent is not created by the owner. In some cases he may perhaps be said to have earned all or part of it; in other cases part or all is certainly unearned, though it may, as far as it could be forecast, have been paid for by an "innocent purchaser."

It is doubtless true that land is not the only source of unearned income. This suggests only that we should seek to apply just public policy to other sources of such income as well as to that from land.

Even if it should be impossible to treat all unearned income alike, justice does not require that we should leave one kind alone merely because we may be unable to reach another kind.

There is a fundamental difference between the effect of the growth of population upon the income from land and its effect upon the income from most forms of capital goods—other forms of capital goods, if you prefer. As population increases, the owner at least of a superior tract of land normally finds the income increasing. As the population increases, the owner of a machine or building, even though superior, does not normally find the income from it increasing. The growth of population normally compels us to use constantly lower grades of agricultural land. It does not normally compel us to use inferior machines. The owner of a manufacturing plant ordinarily finds himself constantly threatened with the competition of new accumulations of capital embodied and directed even more efficiently. His income is likely to decline unless he is able to improve his own plant. This is not true of the owner of farm land.

It is of course true that it is often impossible to distinguish that part of the value of land which is due to human labor and capital from that which is inherent. It is the fashion of some to maintain that the whole or practically the whole value of agricultural land is attributed to labor and capital embodied in it. This is a question of fact, and any real knowledge of the facts forces us to the opposite conclusion with respect to great areas of agricultural lands in the United States. No doubt much land of an inferior character or in the newer agricultural regions could not be sold for more than it can be said to have cost to develop it. But to hold the same of millions upon millions of acres in the better agricultural regions at the present time is absurd.

The conditions have changed radically in the past twenty years. So rapid has been the change that most people have failed to grasp its magnitude or its significance. Barely a generation ago much good land was still to be had free in this country. With the rapid growth of our population, which has doubled since 1880, the good lands have filled up. The margin of cultivation has been forced down. We are using semi-arid lands, swamp lands, lands with inferior soil. The marginal cost of production has risen. Prices of agricultural products have advanced by leaps and bounds. The result has been that our better lands, particularly in view of the anticipation of still further rise in income, have taken on a differential value with amazing rapidity.

The United States Department of Agriculture estimates that the average price per acre of all the farm land in the country increased from about \$15 in 1900 to about \$45 in 1915. In state after state, land values have doubled, trebled, or quadrupled. The value of farm land has increased at least \$25,000,000,000 since 1900. While part of this increase is attributed to increased area, part to improvements incorporated in the soil, and part to the general advance in the level of prices, a large fraction of it is attributed solely to the increased scarcity of good land. A quarter section in Illinois or Iowa, which half or three-quarters of a century ago was obtained free from the government, is now worth \$20,000, \$30,000, even \$60,000.

We are told that if there is sometimes an unearned increment of land, there is also sometimes an undeserved decrement. The sad experience of poor New England is harped upon. No one will deny that during the nineteenth century the opening up of vast new agricultural areas and the improvement of methods of production greatly reduced the prices of farm products and reduced the value of much land. But it is beside the point to speak of the losses of landowners half a century ago as offsetting the gains of other landowners at the present time. The point is that we have come to a complete change. I do not think it is correct to say that we are merely on an upward wave and that after the crest will soon come a trough again. So far as one can forecast, the new tendency will continue so long as for all practical purposes to be considered permanent. The growth of population will doubtless continue. Nowhere in the world are there any considerable areas of land now unused which compare with the bulk of the lands in the humid regions of the United States in adaptability to agriculture. There is little hope of revolutionary discoveries in methods of production. No one, of course, can forecast the future with certainty, but we have no right to trust merely to possibilities in the face of probabilities.

But, we are told, the landowner has earned the increment in land value. It is true that in a new country the settler often purchases farm products at less than cost because of the anticipated increment, and thereby shares the increment in advance with consumers. But again it is beside the point to credit the landowner of today with an increment because some one else earned an increment long ago. The settler expected to get only a moderate reward for his pioneer hardships; he was not looking forward to land worth \$200 or \$300 or \$400 an acre. He earned some increment; in many cases, he got all that he earned; he did not earn all that shall accrue forever.

We have already reached in large parts of this country a condition where unrestricted private property in land is leading us away from the very advantages claimed for it. Freehold in land by the actual tillers of the soil is a good thing, though it does not follow that even the tiller is entitled to an indefinite amount of increment in land value. But tenancy and farming by hired labor are rapidly increasing. The more land values rise and the greater the rent obtainable, the less the owner finds it necessary to work himself. In the richest agricultural counties of Illinois over 70 per cent of the land is farmed by tenants, and hired men do much of the labor on the other lands. In large sections of the Middle West 50 per cent or more of land is farmed by tenants. As the price of land increases, the tenant and the farm laborer find it more and more difficult to become owners. We are building up a new class of non-toiling income receivers. It is still true that a large proportion of the tenant farmers are sons or sons-in-law of owners, but the number of other tenants is steadily increasing. These latter tenants are too often birds of passage who farm inefficiently and rob the soil. This is the more true because many landlords are unwilling to give leases on account of the desire to be free to sell, taking advantage of the increase in land prices.

Ownership of farm lands in the United States is still widely distributed and our attitude toward private property in land may properly be somewhat different from what it would be if ownership were concentrated. Still it is no great comfort to the yet more numerous members of the landless class that the benefit of the steadily enhancing prices of farm products goes to a large number of persons. Moreover, except for the breaking up of great ranches of inferior land in the West, the statistics show no increase in the absolute number of landowners as population increases, so that landowners are becoming a steadily smaller proportion of the population. Besides, as the magnitude of the unearned income of farm land comes to be more generally appreciated by the wealthy, there is danger that they will increasingly buy up land until we have a large measure of concentration in ownership.

It seems to me clear that, especially where land values have already become high, the state should seek gradually to appropriate any further increase for the benefit of the general public, by taxation or otherwise. There are practical difficulties in the way of such a policy but they are too often exaggerated. Time will not permit any technical discussion of the subject. I do not favor confiscation of land values. The "innocent purchaser" must not be mulcted. It may not be possible

to introduce a rational system of land taxation without in some measure injuring present owners, but the injury need be, at most, slight. The anticipated increase of income from farm land in the distant future is valued in the present at a relatively low rate and the increase itself is probably underestimated. The state can look farther ahead than the investor. It can so gradually increase the burden of taxation on lands which command a true rent that the change will scarcely be felt. It seems to me further that the government will be justified in discriminating more or less between those who themselves till the soil and those who hold unused lands for rise in value or who rent land to others.

B. H. HIBBARD.—It is well known that land transfers were by no means free and untrammelled during a large part of the world's history. In fact it was not till after freedom of transactions in chattels had long been the order of the day in Europe that comparative freedom in land sales became prevalent. The restrictions of feudalism died hard, and the supposed freedom which followed was after all genuine freedom to those only who had an economic advantage.

In almost every European country great land holdings, with the necessary tenant adjunct, developed. In few instances, conspicuous among which is France, was anything done to check the growth of these great estates until late in the nineteenth century, or later. In England it was even supposed that an equilibrium had been reached whereby agriculture was prosperous, and the people concerned in it reasonably satisfied, under a landlord-tenant system. The same system in Ireland, however, developed a situation entirely untenable. In most of the other European countries social welfare called for social action, and one after another they have taken up the problem of guiding the process of fitting the land to the people and the people to the land. Emigration or discontent at home made action imperative.

About thirty years ago Germany undertook to develop a land-settlement policy. The first incentive was to mix a leaven of Germans among the Poles, but within a short time the plan assumed a broader gauge. Especially during the past ten years much has been done to break up large holdings in any part of Germany and to put peasant proprietors in charge of moderate sized farms on long-time credit.

Denmark was a country of many big estates and in consequence a great proportion of her farmers were tenants. The movement which on the one hand developed among Danish farmers some of the best coöperative marketing organizations in the world required on the

other hand a closer connection with the soil and the neighborhood than could be had by a tenant. Out of this situation grew a system of land purchase by the government and sale to farmers. The big estates were thus subdivided and sold out on long time to farmers, with the result that over 90 per cent of the farms of Denmark are now cultivated by owners. This is almost an exact reversal of the former percentages respectively of owners and tenants.

In Russia the government buys big estates, gets them ready for peasant farms, and sells them on long time at a low rate of interest, requiring a cash payment of but 10 per cent of the selling value.

The case of Ireland is perhaps best known. Tenancy has very largely disappeared from the island. During the past fifteen years over half of the agricultural land has been taken out of the hands of landlords and put into the hands of peasant proprietors. Ireland seems destined to become almost exclusively a land of small land-owning farmers. Yet under the *laissez-faire* policy the land remained in the hands of a few while the many were in misery. In England the efforts which have been made do not seem to have met with great success so far as the establishment of small holdings is concerned. Yet the last word has not been said, since plans are being made to put a land-colonization plan for both England and Scotland into effect at the close of the present war.

Similar governmental interference with the private ownership of land is taking place in Italy and Austria, and in the various colonies of European countries in Africa. A dissimilar movement is in vogue in France, where a rigid system of dividing up land in inheritances has resulted in making farms too small. To correct this the legal means of settlement without undue division has been provided.

It may be said that the above instances of governmental guidance in land settlement are the result of old systems which have left an unfortunate legacy of concentration of ownership. If that be true, how about the newer countries like New Zealand, Australia, and the United States? The situation in New Zealand is usually characterized as one of land monopoly. Land was held out of higher use for long periods by wealthy men who held it for pasturage, or speculation, or more likely both. At the same time much government land remained unoccupied because of the initial cost of bringing it into use. The government too met both dilemmas. In the case of the government land a system of loans has been devised whereby the farmer receives 60 per cent of the value of the land purchased in the form of a loan. In the case of the big holdings that seem to stand in the way of pro-

gress the solution takes the form of government purchase and resale. The different Australian states have similar but even more elaborate systems for undoing the mistakes of the early land policies and establishing small farmers on land of their own.

Thus a positive policy in place of *laissez faire* is seen to have been introduced into the land system of countries both old and new. How about our own country? Until some thirty years ago land was so cheap and so abundant that the ownership of great tracts brought little satisfaction. The men wishing to own land could pass by the speculators who in some instances had bought a quarter or a third of a million acres from the government and could themselves buy of the government or of some small holder at a moderate price. Indeed since 1862 land has been offered to settlers free, and until the last very few decades this was a fundamental fact in our land question. But within the lifetime of men yet living the episode of free land has passed, as for example in Iowa, where not over thirty-five years ago in some sections land was too abundant to bring a rental of any amount, yet today cannot be bought under \$185 per acre. It is not strange that much land of this character is in the hands of tenants. In the heart of the corn belt are many counties in which tenants outnumber owners. Moreover, the proportion of tenants in this section is on the increase. In the past these tenants have been able in most cases sooner or later to gain the ownership of a farm. Whether or not they will be able to do so in these choicest parts of our agricultural districts is a serious question. That tenancy is a bad condition, one that should be combatted, has not yet been proved. That it should dominate is contrary to all belief. Some conscious effort will undoubtedly be required to prevent the further development of the landlord-tenancy trend. Possibly improved credit facilities may suffice.

Another unfortunate feature of our land situation is that of such districts as the cut-over forest lands of Michigan, Wisconsin, and Minnesota. Land of this character is held by lumber companies or land companies which have bought of it. Speculation has played a major rôle in the transactions up to date. The price is already so high that a poor man must, if he buy at all, go heavily into debt. The cost of clearing is frequently as much as the purchase price, let alone the cost of other improvements. Along with these facts is the important consideration that it is hard to make the land yield much until money and labor have been expended upon it in considerable quantities. Thus the settlement is slow. Clearing is done at the rate of two or three acres per farm per year, and the better part of a man's lifetime has

passed before the raw land has become in reality a farm. There are of course exceptions to the rule. Some settlements are flourishing; but alone and unaided the settler stands a poor show of making rapid progress.

The case seems unmistakable that this wild land under present conditions is not sold on a genuine competitive basis. On the contrary the usual way is to show the prospective buyer what the most successful former purchaser has accomplished and hold that up as a criterion of value. This method of sale is not peculiar to land alone. No, but the bargainers for wild land are not on an equal footing to such an extent as are buyers of horses or cows or dry goods. The purchaser usually comes in from a distance; is not well acquainted with such land; does not see competing salesmen; and does not appreciate the difficulties involved. Time will not permit the full development of this idea, but briefly it is a contention that the generally accepted view that a given buyer is required to overbid the man whose potential buying power is just less than his own is here reversed. In this case the buyer seems to be required to bid a figure substantially equal to the price which the most efficient buyer is able to pay. If this be true it accounts for the fact that so few buyers of such land have left a producer's surplus, but on the contrary very often a deficit which they are obliged to make up by earnings from outside employment. The necessity for state action in adjusting land to people is already recognized in several states. The *laisse-faire* policy is not meeting with universal approval and is called upon to justify itself.

ROY G. BLAKEY.—My friend and colleague, Professor Durand, made two points which, it seems to me, are inconsistent with each other, but which illustrate a very popular misconception about unearned increment in agricultural land values. In the first place, Professor Durand says that the present price of land is not based upon present returns, but is higher than justified by those returns and is due in large part to the increased value which this land will have in the future. When most people talk about the price of land being much too high because farmers can't make more than 1 or 2 per cent upon the capital invested, they forget that this high price is justified by the future increment. With this point made by Professor Durand, I agree.

In the second place, Professor Durand deplores the increasing cost of land which makes it more and more difficult for tenants and others with small means to become owners of land and says that he favors more or less heavy taxes on the increments in land values. He would

not make the taxes heavy enough to confiscate any of the values of present owners, but only high enough to take all or part of the increases above present values, in other words, the unearned increments.

My first criticism is of the misconception involved in the idea that these future increments can be taxed away, wholly or in part, without affecting more or less seriously the values of present owners, if this taxing scheme is made general. This idea is inconsistent with the first point mentioned above, namely, that present values are due, not merely to present income, but also to future incomes, or what is the same thing, to future values.

Land that is worth \$200 an acre today may be worth \$500 in twenty years, even if no additional improvements are put upon it, but merely because population increases and increases the demand for food products. Many would say that the \$300 increase is an unearned increment which society ought to tax away, and they would say further that the present owner's value would not be lowered if the \$300 were so taken because he would still have a value of \$200. But as a matter of fact, in the average case, so far as future contingencies can be calculated, this \$300 would not be an *unearned*, but an *earned* increment, if interest is earned; and I think Professor Durand would not deny interest to investors in land any more than he would deny it to investors in stocks or bonds or other forms of capital.

Suppose A owns a share of stock in one bank which makes and distributes in dividends \$6 annually and that B owns a share in a bank equally well managed but which distributes only \$2 annually and puts the other 4 per cent to surplus each year. At the beginning, each of these shares will sell for the same, say \$100, because each yields 6 per cent. Suppose these banks continue their respective policies and continue making the same rates upon their capitals. A draws and consumes his dividend each year and at the end of any time one may mention, say fifteen or twenty years, his stock is still worth \$100. But B's stock at that time is worth more than \$100, say \$200. Would any one call the increment of \$100 in B's stock an unearned increment? I think not.

A farmer takes up or buys land, he gets along with 2 per cent on his investment, he trusts to Providence that his sixteen hours of labor a day, plus eighteen hours for his women folk, plus the deficit of 4 per cent to make a normal return, will be made up in the future by an increase in the value of his products, or what is the same thing, by an increase in the value of his land. If, in the course of fifteen or twenty years, land which he bought for \$100 an acre becomes worth \$200,

even though he put no improvements on it or in it, is it correct to say that the \$100 increment in this case is unearned any more than was the \$100 increment in the case of the bank stock? Or, to speak more accurately, the only reason he could afford to pay \$100 for the land at the time he did was because this land, in his estimation, would be worth \$200 by the end of a certain period. Any tax that would take away all or part of this future increment would lessen the present value, for the present value is the present worth, or the sum of all future incomes discounted to the present time. Anything that lessens future incomes thereby lessens present values.

But some one will ask, What about free land for which a man made no capital investment? My personal observation and experience has been that free land is often the most expensive that one can acquire. Most urban economists have a wrong conception of marginal land and the margin of cultivation. They seem to think that land is taken up and put under cultivation when the farmer can make wages and interest out of current crops. The truth is that most new land is taken up before it pays wages and interest, because the pioneer expects the losses sustained during the first few years to be compensated for by future increments in land values.

When these increments are realized, usually after many more years of struggle and privation than most people appreciate and even more than the homesteader himself had anticipated, then society is apt to call the increments unearned. But are they unearned? By no means. They were toiled for and waited for long before they were received. In truth, these so-called future unearned increments subsidize the present generation by furnishing it with more and cheaper wheat and other commodities than it would have except for the fact that the pioneer was induced to increase the country's economic land sooner than he would have done except for the increment. The greater the increment, and the sooner it will be realized, the earlier is the land taken up.

In all cases, so far as men are economic men and do not miscalculate, land is taken up at such a time that it will yield no unearned increment or exceptional returns. If it were going to yield exceptional returns, it would be taken up earlier. Of course, it is true that some land has had large increments in value because of miscalculations, but it is probably true that as much or more land has brought decrements as has brought increments, if interest is to be counted, as it certainly should be. Most of us forget this matter of interest. We see present high values and compare them with past low values and jump to the conclusion that they are unearned. We say that they are due to

society. So are all other economic values due to society. But you say, not in anything like the same sense or degree as are land values. If land investments are so favored by society, why is it that so many prefer to invest in stocks, bonds, factories, railroads, and other forms of capital that do not receive the so-called unearned increment to anything like the same degree that land does? To ask the question is to answer it; it is because the so-called unearned increment in land, on the average, so far as can be calculated in advance, is earned just as much as any other value is earned. To tax it away does confiscate present values and discriminates against those who happen to hold their accumulations in the form of land. This is not saying that it would be, or would not be, bad public policy to tax increments in land values. We are not passing upon that question here. But owners of land are no less productive than owners of some stocks, bonds, and many other forms of capital.

Many seem to have the idea that if agricultural land were taxed more heavily, tenants and others could get it more easily than at present. But this is manifestly untrue except as the situation would be influenced by the insignificant amount of such land that is now held out of cultivation by speculators. Taxation means a transfer of rent from private owners to the government. Rent plus taxes would be the same in any case; it would be the total product imputable to the land in question. If the government owned all of the land, the tenants would have to pay for the differential advantages of each piece, just as they do under private ownership. Of course, the rent would be going to the government, the public, instead of to private owners. But this would be no advantage to the public unless it confiscated this land from present owners. Possibly it should be confiscated. Possibly a good many other forms of private wealth should be confiscated also. Once we begin this policy of confiscation it is hard to say where it will lead us, possibly to socialism. The land problem is only a part, although a very important part, of a much larger problem. In arriving at practical solutions, perhaps more attention will have to be paid to the perpetuation of wealth through inheritance than to its accumulation through so-called unearned increments in agricultural land values.

R. R. BOWKER of New York referred to Professor Ely's paper as of large value as a mind-opener, and spoke of the ups and downs of certain lands in Stockbridge, Massachusetts, where the land values are largely for views. He emphasized the desirability of studying decre-

ments in land values, as illustrated in New York by the Twenty-third Street decadence, East Side tenement properties, and the dead district in Brooklyn between the old Fulton Ferry approaches and the approaches of the Brooklyn Bridge.

JOHN A. RYAN.—The great majority of us agree, I presume, that the subject of land has not received sufficient attention in the courses in economics. Professor Ely's paper shows how vast is the field, and how many topics await investigation and discussion. One of the most interesting of these is the question whether unearned income is as common or as important in other kinds of investment as in land. I have never been able to see that it amounts to very much outside of land investments. We need an investigation of the facts to settle this question. As regards Professor Durand's advocacy of a tax on the future increases of land values, I am quite sympathetic, although I recognize that the ordinary effect of such a tax would be to cause the value of land to decline. However, if the tax were light at first, and were increased very gradually, its depressing effect on values might be entirely neutralized by the tendency to increasing values, due to the continuously increasing scarcity of land. Hence no injustice need be done to present owners. The important thing is that land should not rise further in value in this country.

RICHARD T. ELY.—In closing this discussion I must confine myself to a few points. I should be glad if I could speak at length about the unearned increment in land values. This forms part of a larger whole, namely, unearned increments in general and their relation to earned increments. The economic surplus found in the rent of land is only one kind of surplus. It does exist and is found in the rent of land, but it is not so large as it at first may appear to be. We are apt to concentrate our attention on great cities like New York and to forget the many places where there have been large unearned decrements. Moreover, we must consider the services of landowners, particularly in this country, where they contribute through special assessment, taxes, and otherwise to values. I wish someone among you (multimillionaires!) would give me an endowment to enable me to conduct an investigation into the facts of the case. I should like, for example, to investigate the history of real estate in Madison, Wisconsin. It is not a large city, but it is one that is interesting and instructive from this point of view. I believe we could get all the essential facts bearing upon the situation from the beginning when the capital of Wisconsin was located at

Madison to the present time. I believe we could get the history of the real estate companies which have operated in this city.

Let me bring before you one concrete case to illustrate the general situation. I was talking some time ago with a gentleman who owned a business in Madison. I knew that he had had an opportunity to buy two lots in a growing part of the city, where values had increased, but had let the opportunity go. I said to him, "You made a mistake, did you not?" He replied, "No, I do not think so. I had an opportunity to buy stock in a bank, and I think I have made just as much and had far less trouble." We began figuring on the investment he made and the investment he might have made, and I concluded he was right. The lots were bought by, let us say (as is probably the case), the one who did not have the opportunity to buy the bank stock. He had far more trouble with his property and had a smaller return. Was his increment in value unearned, while the increment of the owner of the bank stock was earned? It was the owner of the bank stock who had the special privilege and not the owner of the real estate. Should the owner of the real estate pay a special tax from which the owner of the bank stock should be exempted? If so, why; if not, why not?

It has been proposed that the tax on land, and especially the tax on urban land, should gradually be increased, and a large part of the rent, or all the rent, be absorbed during a thirty-year period. This subject should be carefully investigated before it is endorsed. Would it not be slow strangulation of business, resulting in great depression? I believe it has been nearly forty years since we have had a bank failure in the city of Madison, and for years at a time there has not been a failure of a state bank in Wisconsin. I have been inclined to attribute this in part to rising land values, which have made it easy to get credit and place credit upon a firm basis. The situation would have been very different if the basis of credit, as found in land values, had been gradually dwindling.

A question for investigation also is this: If we should take land out of the field of investment, should we not remove valuable opportunities from the ordinary man and woman? If only the more mobile kinds of property were open for investment, professional people like teachers, preachers, and physicians would be at a disadvantage. Might not the result be such a concentration of wealth as the world has never seen? I would not speak dogmatically on this point, but I think that we have here a topic which is well deserving of investigation.

TWO DIMENSIONS OF PRODUCTIVITY

By HENRY C. TAYLOR

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About twenty years ago, at a time when some men occupying prominent positions in the field of economics were emphasizing the resemblances of the instruments of production, with a view to formulating simple and comprehensive principles, one teacher was saying to his students: "Give careful attention to the differences in the economic characteristics of the instruments of production. In these differences we may find some of the most significant conditions of our economic life." The facts and theories which are presented in this paper are the result of taking this advice.

Much has been heard in recent years about efficiency and the efficiency movement in the industries. It is a matter of no small significance that attention is being turned to that long-neglected branch of our science, the economics of production.

With the increasing cost of living, economy in production is becoming as important a branch of our subject as justice in distribution. The latter has not received too much attention but has received much better consideration than the field of production. The economic problems in agricultural production center about the questions of what to produce; the proper proportions of the factors of production, commonly discussed under the heading of intensity of culture; the size of farms; and the question of the grades of the factors which should be combined. The last problem implies variations in the usefulness of the instruments of production. It appears that these variations have at least two dimensions which are as different as length and breadth. These differences may be designated as differences in capacity and differences in efficiency. It is the purpose of this paper to discuss the significance of capacity and efficiency as they are related to productivity and the problem of land ownership on the part of farmers. Both of these terms are often used in the same sense as productivity, whereas they represent the two conditions of productivity.

Capacity has been defined as power to receive, absorb, take into, or associate with. The word capacity has in recent years been popularly used to indicate the output of a mill or factory. In this paper the original, and still the dictionary, meaning of capac-

ity will be adhered to. In this sense capacity refers to "input," not to output. It has been recognized since the days of Ricardo that land varies with respect to the amount of labor and capital which can be invested per acre with optimum results, that is, land varies in capacity. Cows vary greatly in the amount of feed which they can consume with optimum results when fed with the same care and by the same man, hence cows vary in capacity. The same thing is found true of every specific class of instruments of production from milk pails to threshing machines. Variation in capacity exists likewise in the human factor. There is a very wide range of differences in men with respect to the amounts of land, labor, and capital they can operate. High capacity is not always a desirable quality. For example, certain land requires much more power to plow and more work with the pulverizer and harrow to put it in condition for planting seeds, yet does not produce extra large crops per acre. The labor of milking some cows is twice as great as that required in milking others, and they do not necessarily produce any more milk. Capacity, or the power to absorb the other factors, implies nothing as to usefulness of a factor unless taken in conjunction with efficiency.

Efficiency is defined as a ratio between the energy put in and the results secured. The efficiency of a factor of production is measured in terms of the value of the product per unit of the other factors (of given grades of efficiency) when associated in the most profitable proportions. To illustrate, two pieces of land may yield widely different results per hour of man and horse labor expended upon them by the same man. Two cows may vary widely in the amount of butter fat they yield per pound of feed consumed when the two cows are fed by the same man upon the same feeds.

The relation of capacity, efficiency, and productivity are easily understood. The productivity of a physical unit of an instrument of production, as an acre of land or a cow, is the resultant of capacity and efficiency. The product divided by the capacity equals the efficiency. In other words, capacity relates to "input"; efficiency to "output" per unit of "input"; and productivity relates to the total product per acre of land, per cow, or per man. The calculation of efficiency may be made in terms of physical product or in terms of the value of the product. In analyzing the productivity of cows and other movable instruments of production, physical productivity is often the better basis of comparison because of differences in values at different locations. In

the case of immoveable instruments of production the value of the product is the more satisfactory basis of comparison.

Ricardo recognized two dimensions of productivity as they relate to land, but he apparently did not see that they applied also to the other factors of production. In their attempts to simplify a subject which by nature is complex, some writers have desired to reduce all differences to difference in capacity, in order to assume that physical units of a factor, say men, are quite *interchangeable*. But as a matter of fact differences in efficiency cannot be commuted into differences in capacity.

A few facts may help to make clear the ideas in mind. In recent years a great deal of first-hand study has been made of the conditions of productivity in agriculture. The census method and the accounting method have been largely used in this work. In Table I is found the results of a careful census of the farmers centering about Dallas, Barron County, Wisconsin. There were fifty-one farmers in the community. The returns which these farmers secured per dollar of annual outlay varied from 76 cents to \$3.05. In this calculation the annual outlay included all operating expenses, including depreciation and interest. A glance at the second column of figures in Table I shows a variation from \$1734 to \$2993 in the annual outlay with which these farmers associated themselves. The former are termed variations in efficiency; the latter are designated differences in capacity. (Though the writer would recognize that perfect adjustments may not exist with regard to the amount of land, labor, and equipment associated with some of the men, yet these men are probably striving for the optimum.) The variations in total product per man range from \$3644 to \$686. The farmers, as the residual claimants, received payments for their efforts varying from \$1961 to minus \$338. It will be noted that, so far as the figures in this table go, there is no definite relation between a man's capacity as measured by his outlay and his efficiency as measured by product per unit of outlay. A man with high efficiency may have low capacity and the man with high capacity may have any degree of efficiency. These facts are brought forward to illustrate the well-known fact of variations in the ability of men and to note that at least two measuring sticks are needed if we hope accurately to measure man's ability.

Table II illustrates some of the differences which exist in one class of instruments of production, namely, cows. This table

shows the best ten and the worst ten of 398 cows entered in the Wisconsin Dairy Cow Competition during the two years 1909-1911, each cow being in the contest one year. It will be noted that the difference in value of product per dollar's worth of feed consumed by the best ten cows varied from \$2.71 to \$2.19 and that the range for the least efficient ten cows was from \$1.25 to 92 cents. The total range was from \$2.71 to 92 cents, the average result of the best ten was \$2.38 and that of the least efficient ten was \$1.12. In Table II a common or standard price level was used in calculating the cost of the feed and the value of the product. It remains, however, to be explained that these cows were not all under the same management. The differences in product per unit of feed are due, therefore, to differences in the efficiency of men as well as to differences in the efficiency of cows. The cows in one herd in the same barn, receiving the same feed, care, and management, must be compared if cow efficiencies are to be isolated. In Table III this condition is provided. Twenty-six cows, all pure-breds and supposed to be very high class, show a range in efficiency from \$2.46 to \$1.44. The surplus product over feed cost being more than three times as great from the most efficient as from the least efficient. The range in capacity was from \$99.83 to \$82.69. It is possible to pile up unlimited quantities of facts which show similar variations in the other instruments of production.

The fact of differences in efficiency and capacity granted, are they significant from the standpoint of production? From the point of view of the effective management of farms the significance of this analysis of the grades of the factors of production lies in its relation to the problem of *right choice* of the instruments of production which are to be combined under a given management.

If differences in market valuations correspond to each man's estimate of the variations in the usefulness of these instruments, the problem of choice would be solved, but unfortunately this is not true. The individual valuations of given instruments of production have a wide range above and below the market valuations.

It is this discrepancy between individual and market valuations or "value in use and value in exchange" which prohibits taking the position that one dollar's worth of agricultural land, labor, or equipment is as useful to the farmer as any other dollar's worth, that market prices eliminate the necessity of careful selection of the grades of the factors of production, and which makes it neces-

sary for each farmer to use great care in the choice of the productive agents with which he associates himself.

Does it make any difference which grades of capacity are chosen? Only in the same sense that the mason finds use for stones of different sizes in building a wall, each occupying space according to its size, where there are spaces of varying dimensions to be filled. To take specific cases, a low capacity cow may best serve the purpose of a city man wanting a small amount of milk for his own family. A boy of half capacity may just fill out the need for additional labor on a given farm. Aside from this, choice is not based upon capacity but upon the efficiency of the factors.

The surplus product of cow No. 1 is much greater when on the farm of Mr. A. than when on the farm of Mr. B. Because of this Mr. A. can pay more for this cow than Mr. B. can pay without suffering a relative loss. Furthermore, the surplus due to Mr. A's superior efficiency is greater when he keeps cows of superior efficiency than when he keeps cows of low efficiency. The result of competition tends therefore to put the most efficient cows into the hands of the most efficient dairymen, and the marginal cows into the hands of the marginal dairymen. This seems to be true of all the factors of production and tends to combine these factors on the basis of their grades of efficiency. If a given farmer associates himself with an efficiency grade other than that which corresponds to his own grade of efficiency, whether it be higher or lower, his profits will fall short of the possible maximum.

How does this affect total productivity? Total productivity of society is greatly increased by the combination of the factors which throws the most efficient factors together. The productivity of the inefficient is minimized, it is true, but the productivity of the most efficient is at the maximum, and the total product, it is believed, is greater than any other combination would yield. True social economy calls for this combination, and it is these facts of variation in efficiency which give hope that competition may gradually lift the average of efficiency by the elimination of the marginal and the multiplication of the better and the best. So long as this process is in operation poorhouses will be needed, but is it not cheaper to provide for the inefficient in this way than to have them match their inefficiency with land and equipments which have high potential productivity?

Variations in efficiency and capacity have an important relation

to the problems of the distribution of wealth, with especial reference to the ownership of land. It is the wide range in the efficiency and the capacity of farmers that makes possible the saving of the funds essential to the climbing of the agricultural ladder. Assuming the acceptance of the theory of the relation of prices of agricultural products and marginal costs, it follows that every man possessing efficiency superior to that of the marginal farmer may save from the surplus and rise to a higher rung on the agricultural ladder. It would seem also that the man of high capacity may save more than his competitor of equal efficiency who possesses lower capacity, the assumption here involved being that the man of high capacity may have the same standard of living as his competitors. The emphasis is upon the opportunity to save, not upon the use made of this opportunity. This all points to the need of keeping obstructions off of the agricultural ladder, so that there will be an inducement to save with a view to buying land.

It is because of the significant relation of these variations in the usefulness of men and capital goods to the problems of economy in production and to a socially desirable distribution of agricultural wealth, that I have asked your attention to this subject. For the sake of brevity many arbitrary statements have been made which I might rather have put in the form of questions. The question of terminology is entirely superficial, yet I shall be pleased to have suggestions on the choice of terms as well as upon the development of principles.

TABLE I
VARIATIONS IN EFFICIENCY AND CAPACITY OF FIFTY-ONE FARMERS
LIVING NEAR DALLAS, BARRON CO., WISCONSIN

EFFICIENCY		CAPACITY		PRODUCTIVITY			
Rank	Product per Dollar of Outlay	Rank	Annual Outlay	Rank	Total Value of Product	Rank	Residuum for Farmer's Effort
1	\$3.05	48	\$ 421	37	\$1285	18	\$ 864
2	2.84	33	932	8	2649	4	1717
3	2.63	47	434	41	1143	22	709
4	2.48	51	293	48	727	34	434
5	2.40	49	333	46	799	32	466
6	2.16	4	1683	1	3644	1	1961
7	2.13	16	1334	7	2844	6	1510
8	2.12	39	775	26	1646	16	871
9	2.11	29	1026	16	2165	12	1139
10	2.10	13	1379	6	2895	5	1516
11	2.10	32	961	18	2018	13	1057
12	2.09	1	1734	2	3619	2	1885
13	2.07	5	1675	3	3473	3	1798
14	2.05	21	1203	10	2472	8	1269
15	2.03	30	983	19	2000	10	1017
16	1.90	50	395	49	749	41	354
17	1.88	15	1344	9	2533	11	1189
18	1.86	6	1618	4	3016	7	1398
19	1.84	42	739	33	1361	26	622
20	1.83	37	881	27	1610	21	729
21	1.82	18	1266	13	2307	14	1041
22	1.75	24	1124	20	1963	19	839
23	1.72	3	1695	5	2909	9	1214
24	1.71	17	1278	15	2192	15	914
25	1.71	45	563	45	962	36	399
26	1.70	35	894	29	1522	25	628
27	1.64	44	620	43	1015	38	395
28	1.62	12	1392	14	2259	17	867
29	1.60	43	715	40	1146	35	431
30	1.60	23	1165	22	1868	23	703
31	1.59	36	885	32	1410	29	525
32	1.56	46	440	51	686	44	246
33	1.52	40	764	39	1162	37	398
34	1.52	22	1173	25	1778	27	605
35	1.48	7	1595	11	2358	20	763
36	1.47	27	1090	28	1602	31	512
37	1.47	31	978	31	1435	33	457
38	1.38	14	1358	23	1878	30	520
39	1.37	2	1703	12	2339	24	636
40	1.36	8	1595	17	2165	28	570
41	1.29	28	1018	36	1309	42	291
42	1.26	9	1505	21	1898	39	393
43	1.24	10	1492	24	1853	40	361
44	1.24	20	1211	30	1496	43	285
45	1.20	25	1103	35	1320	45	217
46	1.11	26	1095	38	1219	46	124
47	1.08	34	932	44	1009	48	77
48	1.07	19	1263	34	1348	47	85
49	1.02	41	742	47	759	49	17
50	.88	38	804	50	713	50	-91
51	.77	11	1469	42	1131	51	-338
Average	\$1.66		\$1079.8		\$1797.2		\$717.4

TABLE II
EFFICIENCY, CAPACITY, AND PRODUCTIVITY OF THE BEST TEN AND THE POOREST
TEN OF THE 398 COWS IN THE WISCONSIN DAIRY COW COMPETITION, 1909-1911
(FEED AND PRODUCT VALUES STANDARDIZED)

The Most Efficient Ten Cows							
EFFICIENCY		CAPACITY		PRODUCTIVITY			
Rank	Product per Unit of Feed	Rank	Value of Feed Consumed	Rank	Value of Product per Cow	Rank	Value of Product minus Cost of Feed
1	\$2.71	8	\$ 75.32	5	\$204.11	4	\$128.79
2	2.26	5	88.56	6	200.33	7	111.77
3	2.60	10	64.62	10	167.94	10	103.32
4	2.49	9	72.60	9	180.60	8	108.00
5	2.46	2	99.83	2	246.10	2	146.27
6	2.36	7	78.24	8	184.94	9	106.70
7	2.34	6	83.88	7	196.06	6	112.18
8	2.31	3	99.20	3	229.55	3	130.35
9	2.28	4	94.06	4	214.87	5	120.81
10	2.19	1	129.40	1	283.84	1	154.44
Average of best ten	\$2.38		\$88.57		\$210.83		\$122.26

The Least Efficient Ten Cows							
1	\$1.25	6	\$ 77.17	3	\$ 96.69	1	\$19.52
2	1.20	2	96.55	2	115.75	2	19.20
3	1.18	10	67.28	8	79.10	5	11.82
4	1.18	9	74.82	6	88.06	4	13.24
5	1.13	1	103.69	1	117.45	3	13.76
6	1.11	4	82.47	4	91.72	6	9.25
7	1.10	7	75.22	7	82.66	7	7.44
8	1.06	3	84.85	5	90.26	8	5.41
9	.98	8	76.38	9	75.14	9	-1.24
10	.92	5	80.26	10	74.16	10	-6.10
Average of poorest ten	\$1.11		\$81.87		\$91.10		\$9.23

TABLE III

VARIATIONS IN EFFICIENCY AND CAPACITY OF 26 REGISTERED COWS OF THE
SAME BREED UNDER THE SAME MANAGEMENT

EFFICIENCY		CAPACITY		PRODUCTIVITY			
Rank	Product per Unit of Feed	Rank	Value of Feed Consumed	Rank	Value of Product per Cow	Rank	Value of Product minus Cost of Feed
1	\$2.46	1	\$99.83	1	\$246.10	1	\$146.27
2	2.40	16	86.42	5	207.76	4	121.34
3	2.38	7	91.05	3	216.52	3	125.47
4	2.34	5	94.05	2	220.01	2	125.96
5	2.28	4	94.06	4	214.87	5	120.81
6	2.13	18	86.06	6	183.53	6	97.47
7	2.09	20	84.20	10	176.39	7	92.19
8	2.06	14	86.70	8	178.56	8	91.86
9	2.05	13	86.75	9	178.11	9	91.36
10	1.93	15	86.59	13	166.70	12	80.11
11	1.91	11	88.52	12	169.20	11	80.68
12	1.91	6	94.01	7	179.25	10	85.24
13	1.82	17	86.23	15	157.20	14	70.97
14	1.76	3	98.93	11	174.64	13	75.71
15	1.74	26	82.69	20	143.61	18	60.92
16	1.73	25	82.94	22	143.18	10	60.24
17	1.72	12	87.03	18	150.02	16	62.99
18	1.72	9	89.07	16	153.51	15	64.44
19	1.72	21	83.52	21	143.61	20	60.09
20	1.69	23	83.10	23	140.46	22	57.36
21	1.69	9	89.16	17	150.68	17	61.52
22	1.65	24	83.01	24	136.60	24	53.59
23	1.63	8	89.32	19	145.41	23	56.09
24	1.60	22	82.22	25	131.35	25	49.13
25	1.58	2	99.74	14	157.28	21	57.54
26	1.44	19	84.77	26	122.22	26	37.45
Average	\$1.91		\$88.46		\$168.72		\$80.26

TWO DIMENSIONS OF PRODUCTIVITY—DISCUSSION

E. DANA DURAND.—Professor Taylor's methods and results are exceedingly interesting. One would wish to know, however, whether the returns for the individual man are typical. If they represent a single year's business only, the relative figures for the different men might be greatly affected by accidental circumstances, such as exceptionally high or low prices for particular crops, exceptionally favorable or unfavorable weather for particular crops. Of course if all the men were engaged in practically the same type of farming and affected alike by the conditions, the results even of a single year would be fairly comparable.

(In answer to this Professor Taylor stated that the figures related to a single year but that the university proposed to keep up the system in the same community for a series of years to get more typical results. He also stated that the farmers were largely engaged in substantially similar farming operations.)

A. A. YOUNG.—Professor Taylor has again made us his debtors for a study of a kind all too rare, in which the results of painstaking statistical research and of careful consideration of some fundamental problems of economic theory are brought together to illuminate each other. If time permitted I should want to dwell longer on the value and significance of Professor Taylor's work. But Professor Taylor has proffered his paper as merely a tentative formulation of his own conclusions, and has invited suggestions. So it will be better, I suppose, to confine myself to certain minor points where I do not feel quite certain about Professor Taylor's interpretation of the meaning of his figures.

I do not imagine that Professor Taylor meant to be taken quite literally when he said that his "two dimensions of economic productivity," capacity and efficiency, "are as different as length and breadth." At any rate, these two variables do not seem to me to be wholly independent. Professor Taylor's index of efficiency is "product per dollar of outlay," and this, for each farmer, may be viewed as an *average*. Now the good farmer and the poor farmer alike have to encounter the fact of diminishing productivity. The particular phase of the principle of diminishing productivity which is important here is not that which we set in the foreground when we analyze the way in which the amount of the product or yield per unit which has to be imputed to any one sort of productive agent diminishes as more units of that particular agent are combined with a given equipment of other

productive agents. For the general theory of distribution this is undoubtedly the most significant aspect of the matter. But for certain other purposes,—especially the theory of the size of the business unit,—our emphasis has to be put on the diminishing yield of *any or all* of the different productive agents when utilized in connection with any one enterprise or business scheme. Here we must think, not of labor as “applied to land,” but of labor and land and other productive agents as being used together, in larger or smaller amounts, in some one money-getting enterprise.

The farmer who gets a larger yield per dollar from the specific amount of expenditures he finds it most profitable to make than some other farmer gets from the (different) amount of expenditure which happens to be, for him, the most profitable amount, is not necessarily, by all standards, the more efficient farmer of the two. It may be that the second farmer's expenditures and product are much larger than the first's; it may be that if he farmed on as small a scale as the first farmer his product per dollar of outlay would be larger; it may be that for this reason he can push his expenditures further before coming to the no-profit margin; it may be, also, that this is precisely why his actual product, per dollar of outlay, becomes smaller than that of the first farmer. The ability to get a larger yield from a given amount of resources may be the underlying cause of larger “capacity,” and this may show itself in a lower degree of “efficiency,” as defined by Professor Taylor. High “efficiency” may thus sometimes merely be the result of a relatively steep curve of diminishing productivity.

I do not attach a great deal of weight to this point, because Professor Taylor's figures do not suggest an inverse correlation between “efficiency” and “capacity,” and, further, because they indicate a higher degree of direct correlation between the “residuum for the farmer's effort” and “efficiency” than between this residuum and “capacity.”

I am not quite clear about the basis of Professor Taylor's conclusion that “the result of competition tends to put the most efficient cows into the hands of the most efficient dairymen and the marginal cows into the hands of the marginal dairymen.” I don't doubt the fact. But I can't see that it follows from Professor Taylor's figures for “efficiency.” Isn't this problem a matter, not of average problem per unit of outlay, but of specific product at the no-profit margin?

J. G. THOMPSON.—Professor Taylor has asked for suggestions with reference to the use of terms, or otherwise. I would say that his

usage of the term "capacity" seems to me somewhat open to objection, although I can see what he has in mind in using the word as he does. In ordinary usage "capacity" is very closely related to "efficiency"—the very word or term over against which he is attempting to set the former. Would it be possible to use the word "intake" instead? This would seem to express fully the idea that Professor Taylor has in mind and would at the same time be free from the objection of partial identification with the term or word with which it is meant to be contrasted.

Professor Young has suggested that these figures from Professor Taylor's tables may give a wrong impression with regard to efficiency, since a man with the ability to handle a great number of productive units and thus with a slowly declining curve of efficiency may show, by this standard, less efficiency per unit than a man of small ability, whose efficiency falls away very rapidly after the first few units and who therefore commands only a few units, with a relatively high average efficiency for the units commanded. But, from the community point of view, at least, efficiency would seem to be properly interpreted by Professor Taylor's tables. For it is evident that it is more to the advantage of the community to have the productive units effectively used in small amounts by many men of smaller capacity than to have a few men of great ability for large enterprises command so great a number of units that there is a serious impairment of the productivity of the last units utilized and thus low average productivity per unit as a whole. There would appear to be, too, a tendency for these men of smaller ability to win over, from the abler men, the control of these additional units that cannot be used so productively by the latter, because the former can make them yield more and can therefore pay more for their control than can the latter. Competition tends to bring this result about, and it would seem to be desirable from the community point of view.

FRANK A. FETTER.—The Chairman has asked what the economic theorists may think of the possibility of learning from the agricultural economists. Speaking for one, I would say it is not the first time we have been under obligations to Professor Taylor, as well as to other agricultural economists. Years ago, as a contributor to the newer doctrine of rent, he earned a right to our respectful attention and to our gratitude. He has helped to show that the abstractions and generalizations regarding land, presented a hundred years ago in England, under very different conditions, have little application to the practical problems of our own day. The students of economic theory will do

well to heed on the one hand the work of the agricultural economists, and on the other hand the work of the cost accountants and statisticians. These men, who are studying the concrete facts of our environment, are doing effective work, from which economic theory may learn vital lessons. The sessions on economic theory in this association have sometimes been filled with lamentations at the lack of progress in the subject. There are some pessimists among us who seem to think that the only good economic theorists are dead economic theorists. But such sessions as that of this morning and as the present one, give encouraging evidence that we are seeking economic theory not so much in the dusty volumes of Ricardo and Mill as in the living pages of our own times. In studying the actual conditions around us we are finding new conceptions, a new terminology, and a new economic philosophy, at once more logical and more fitted to our needs than are those of the English school.

THE RESULTS OF SOME RURAL SOCIAL SURVEYS IN IOWA¹

By GEO. H. VON TUNGELN
Iowa State College

The highest achievement to which civilization can aspire is maximum human well-being, and to point the way to this goal is the business of the student and leader of men. In order, therefore, that he may be enabled to set both the danger-signals and the sign-posts along the road civilization must travel, the student, through his science and leadership, must not only find means whereby abnormal and undesirable conditions can be restored to the normal and desirable state, but must also determine means of prevention and invention: prevention of that which would impair human well-being and invention or discovery of that which will increase human weal or human happiness.

It is to the student and leader that society looks for its remedial and preventive suggestions and measures. Society is no longer satisfied to proceed on the hit-or-miss or the put-the-cart-before-the-horse method. It is no longer willing to take the leap into the dark, but rather persists in emphasizing its belief, that in first knowing definitely what conditions now are, there may be secured a clearer idea as to what conditions might be, as well as a clue or guide to the realization of what might be. It insists that the next step in the social field is not theorizing but the gathering and compiling of more facts.

With the advancement of the human race there comes an ever growing complexity of human relationships and an ever increasing interdependence of individuals upon each other. This is the day

¹ Since this paper was to be read before an association that is primarily interested in the study of economic problems, the writer has emphasized chiefly economic conditions and such other conditions, which the two surveys revealed, as are rather closely related to these economic conditions. The more purely sociological conditions and information that reveals the social mind of the communities have been purposely omitted. Believing, however, that most economists are mindful of the importance of the rural social mind and rural social conditions, the writer has taken the liberty to add a few of the questions asked that revealed the social mind, and just a few statements concerning the social life in one of the townships. The figures in this paper appear in Bulletins No. 170 and No. 171, by the same author, of the Agricultural Experiment Station, Iowa State College, Ames, Iowa. These bulletins are social surveys of the respective townships.

of specialization in work and of generalization in citizenship. That is to say, man as a workman is more and more limiting his activities to a narrower field, he is specializing, while his experiences and responsibilities as a citizen of society are constantly expanding. In the day of undifferentiated employments man was most independent, whereas, in this day of division of labor within differentiated employments, he is most interdependent. Today the same individual, in pursuing his responsibilities as a workman and his duties as a citizen of society, is subjected to experiences which tend to produce in him opposite results. However, it is precisely in meeting this dual experience that he also faces the dual problem of life which all must meet: the problem of getting a living and the problem of living with and among his fellowmen.

In the past the scientist devoted his energies almost entirely to assisting man in his endeavor to meet the first of these two problems, the problem of getting a living. In the past it was probably proper that he should do so, for the possible standard of living and the stage reached by civilization did not, for the most part, permit man to divide the day into more than two parts, a time for work and a time for sleep. Today the higher stage reached by civilization makes it possible, and a better standard of living demands, that the day be divided into three parts: a part for work, a part for sleep, and a part for leisure, recreation, or, as it is sometimes spoken of, higher life. This threefold division of the day, together with the specialization of man as a workman and the generalization of man as a citizen, so characteristic of this age, brings into full interplay both of these problems of life that man must meet. Therefore, the scientist, or investigator, must be mindful of both, if he is to be of greatest service to his day and age. In order to enable him to render such service in the most efficacious way he must first know how men are trying to meet these problems and with what success they are accomplishing their end. Having this information he will probably be in a position to suggest improved lines of action to achieve what is already being done and also point out new lines of action to effect other desirable results. To secure this information the student of social problems properly resorts to the social survey, or original investigation.

Such a survey or investigation may be briefly defined as taking an inventory of a community's activities and conditions, or a community stock-taking.

The aim of such a study is twofold: first, to get a true-to-life picture of the community in its every walk of life; and, second, to take back to this community this true-to-life picture of itself by disseminating knowledge of this picture among the members of that community, hoping in this way to create a fuller appreciation, on the part of the members of the community, of its desirable features because they are better known, and creating at the same time a more active determination, on the part of the members of the same community, to eliminate its undesirable features, because they too have come to be better known and have been brought out into a bolder relief across the plane of that community's well-being. From this it is at once obvious that the purpose of the social survey is not "to show-up" a community but "to build up" a community.

The method of study and the scope or field to be covered by the student in making a social survey must be determined mainly by the object he has in view in making the investigation. If his study is to be intensive and specific, or a study that involves very definite and detailed information, rather than extensive and aiming at generalizations only, he must of necessity attempt to cover only limited areas in individual studies. This must be done for the reason that regions where the same conditions are likely to prevail with somewhat of the same degree of regularity and intensiveness are limited in area. A study, therefore, that is to reveal community characteristics in detail must be limited by community boundaries. It is not always possible to determine absolutely where the community boundaries are, but to neglect them entirely will mean that such an intensive study does not very accurately reveal the conditions of either the entire area covered or any part thereof, and cannot therefore serve as the best possible guide for advancing the interests of the area included in the study. In order to secure this detailed information the investigator will find it necessary to interview either personally, or through his trained assistants, each family that resides in the territory covered by his study, that he may secure the information at the source and at first-hand. Having interviewed all the families in this way, he should then check up the information thus secured in every way that is available to him, in order to eliminate, as far as possible, exaggerations, misrepresentations, and omissions in his data.

It is this type of survey that this paper deals with in the presentation of the facts that we are to consider presently.

If the study is to be of the extensive type, if only general information is sought, or if the student wishes to know only what the general tendencies are and is not looking for very clearly defined lines of demarcation, than a much larger area may be included in his study, and he need not always personally interview each family which resides within the region covered by his study. Often several well-informed persons of that, or near-by regions, can, between them, give him the information he desires. Such a study is, of course, chiefly intended to furnish the investigator with some desired information, often without any particular thought of what seems to me to be the greater function of such research, serving as a guide to the people of the region studied to the end of enlarging their own welfare. An intensive study may serve then as a very definite guide to the people of the region studied, and also offer helpful suggestions to other communities as to how they may best go about improving their conditions. Since there are no two identical communities, it cannot be a complete guide to such other communities, for the obvious reason that it is not an exact revelation of their conditions. In the case of the extensive study not a great deal may be expected of it in either of these services, because its revelations are not specific enough to suggest clear-cut programs of procedure to achieve either of the these ends.

The value of a survey is very largely determined by the accuracy of the data collected. The best way to secure most accurate data, I believe, is to put the work of collecting them on such a basis that the people of the community will give one the data asked for voluntarily and without hesitation. It is human nature to feel that one is important, and if, therefore, you seek the honest coöperation of others, the surest way to get it is to give them an opportunity to play an important part in the scheme and allow them to take to themselves considerable credit for having played their part. This is the method that I pursue in the work we are doing in Iowa. That is to say, I first consult with the County Agent, if there is one, and a few of the leading men and women of the community as to the purpose of such a study and the coöperation they think could be secured in carrying on a piece of research of this kind in their locality. If these persons think the time is ripe for work of this kind in their locality, I make a trip to the community and put the proposition before the people at some public meeting, usually several months before we

are ready to begin the work in the field. After this meeting the proposition is left with them to be talked over *pro* and *con* for some time before a final decision is made as to whether or not the study is to be made. In passing, I may say that such a proposition may well be considered at some community meeting, such as is usually to be found in most communities today. It has been considered on such programs in Iowa.

If the community votes to have the study made, a survey committee is appointed, composed wholly of members of the community, which is to serve as a sort of advisory council to my assistants and myself when we enter the field to collect the data. Any question that may arise about the work is referred to this committee or some member thereof. This same committee also talks up the proposition to any who may be somewhat inclined to oppose the work, or who they think may hesitate to give us the data asked for in our house-to-house canvass. I see to it that this committee is representative of all chief interests, creeds, etc., found in the community.

Along this same line, I emphasize, in all of my conferences with the people of the community or representatives thereof, that this is their work and not ours, that we merely stand ready to make the study for them. In this way they take a just pride in it, because they feel that they are a long step ahead of the community that will not coöperate in making a study of itself, or that has not yet been asked to do so. In keeping the work on this plane, I have found that the people of the community who have once voted to study themselves in this way will gladly submit themselves for sociological clinic work, because they feel that thus they will learn to know their virtues better, and, what is no less important, find a way to heal their own sores.

While in the field both my assistants and I live right with the people. This has the advantage of putting us in close and intimate touch with the people we are studying. In this way we learn much about the social mind of the people which one would not get in any other way. It is the one way in which they will "loosen up to you," as the saying goes.

By following this method I have every reason to believe that one can with equal frankness and boldness emphasize the desirable and undesirable features which the data reveal concerning the community, and have the community use both to its own self-improvement, rather than become indignant at the undesirable

revelations. My reason for believing this lies chiefly in the fact that in the two communities which we have studied to date many of the most influential members of each community repeatedly said to me, in substance, *Make a careful study of our conditions, do not spare us in any way, we want to know both our credits and our debits.* It is at once apparent that communities of this type have come to believe that if for the individual the height of wisdom is to know himself, the same must be true for the community also. If the work can be placed and kept on such a footing, I contend that high achievements may be expected of it. Communities that do things on such a basis are operating under a moral pride that has been harnessed up to carry out a civic need.

Before taking up the details of the studies we have made in Iowa I must burden you with a few explanations concerning the regions studied. A criticism that may at first be leveled against the work is that we studied communities that are above the average of our state rather than those on a low level in general well-being. That being the case, it can scarcely be expected that our studies will help the communities studied as they might had we studied a type of communities less advanced. My answer to such a criticism would be: first, that no community is so nearly perfect that it cannot profit greatly by a study of itself; and second, and this is the chief answer, that it is not easy to make a study, successfully, where many searching and even personal questions are asked, in the more backward communities. Such communities have not yet awakened from a lethargy of self-conceit or self-satisfaction to the extent that they can be led to appreciate that a study of this kind is intended for something greater than "showing up a community." From communities that are still in such a "clam" stage one cannot hope to secure much information except of a very general type, such as an investigator could secure by observation, or information that is very much exaggerated. They are not ready to study themselves. But by studying a few of the more advanced communities first, we hope to be able to go from the top down to these less advanced communities, by being able to take to them, in black and white, what has already been accomplished by other communities. If the accomplishments of other communities can be brought to them in unmistakable terms, we believe that they will begin to talk of their own conditions, compare themselves with others, and when this is once well under way solutions will also be forthcoming in these localities.

A second criticism that might be raised against the work is, that the areas covered and the number of people involved in each study is too small to warrant drawing hard and fast conclusions as to the conditions to be found over the state generally. To this I would reply: first, that our work in Iowa, as in most regions, is still in its incipiency; and second, that we do not wish to be understood as concluding from these studies that they reveal conditions generally for the entire state, for we feel quite certain that they do not, but that on the contrary other communities differ from these communities just as these differ from each other. All that we wish to contend is that these studies do reveal conditions in their respective localities, and that to know conditions in other localities similar studies must of necessity be made. Of course, no one would propose a study like this of every township in the state, but enough fairly representative townships, or communities, should be studied in different parts of the state to give us a fairly representative cross-section view of conditions generally, to serve as a scientifically practical basis for constructive work.

The scope of this paper includes two civil townships, both in the northern half of the state, one in Blackhawk County, known as Orange Township, and the other in Clay County, known as Lone Tree Township. Orange Township is a strictly rural township containing no incorporated village or town, while Lone Tree has one small incorporated village of 472 persons. The village population and the land within the incorporation were not included in our study. Orange Township is also not of regular size. The conditions in Orange Township are possibly a little above the rural average for the county, while the conditions in Lone Tree Township are more nearly average for the county. Both townships are mixed farming regions, that is, both grain and stock-growing regions. The chief crops grown are corn, oats, and hay.

In both of these studies I have listed as owner, unless otherwise stated, both those farmers who own all the land they operate and those who have a part interest in the land they operate. In case of the latter each happens to own one-half interest. Then I have listed as tenants, unless otherwise stated, all farmers who rent all the land they operate and also those who rent the places they live on, even though they do own some land in addition to the places they live on. In case of the latter a few farmers operate the land they own in addition to the land they rent, but the average holding of this entire group of tenant farmers is much smaller than the

farms they rent and live on; thus it seemed fairer to class them as tenants, especially since some of the holdings of this class lie outside of the state. Furthermore, only a small proportion of the entire number of farmers is included in the part-owner group and the group of tenants that own some land in addition to the farms they rent and live on, as will be observed from the figures given below.

The number of farms, as that term is to be understood in this paper, means the number of farms that have residences on them.

Hereafter these regions will be referred to as Orange Township and Lone Tree Township, respectively.

POPULATION AND CONJUGAL CONDITIONS

The 1910 Federal Census, Supplement for Iowa, gives the state of Iowa a population density of 40 persons per square mile. For the rural state it is 27.8 persons per square mile. Blackhawk County has a rural density of 23.3 and Clay County 17.3. The 1915 Census of Iowa, classing as rural those who do not live in incorporated places, gives Blackhawk County a rural density of 20.8 and Clay 15.1.¹ The 1915 Census of Iowa also gives Orange Township a population of 780 and Lone Tree Township, exclusive of the incorporated village of Everly, 405. The density of population for Orange Township is 23.56 persons per square mile, and for Lone Tree Township it is 13.47 persons.

Our data, so far as they pertain to the population, were a study on the family basis. In this were included all members of the family now living, whether they were living in the township or not. There are also some duplications, arising from cases where parents and children now comprise different families, but both living in the township. On this basis we found the population, including hired help but excluding other persons living with the farmers' families, to be 802 in Orange Township and 482 in Lone Tree Township.

Country of Birth.—Of the owner operators of Orange Township 85 were born in the United States, 1 in Germany, and 1 in Canada.² Of the wives 78 were born in the United States and one in Canada.³ Of the tenants 53 were born in the United States, 1 in Ireland, 1 in Sweden, and 2 in Denmark.⁴ Of the tenants'

¹ P. xxiv.

² This includes one case of joint operators and 2 women operators.

³ Five owners have no wives.

⁴ This includes one case of joint tenants and 1 woman tenant.

wives 44 were born in the United States, 2 in Denmark, 1 in Poland, 1 in Canada, 1 in Ireland, and 1 in Sweden.⁵

Of the owner operators in Lone Tree Township 19 were born in the United States and 11 in Germany.⁶ Eighteen operators' wives were born in the United States, 9 in Germany, and 1 in Ireland. The country of birth for the tenants is as follows: United States, 30, German 19, Denmark 4, France 1, Sweden 1, and Canada 1.⁷ Tenants' wives gave as their country of birth: United States 31, Germany 12, Denmark 4, and Sweden 2.⁸

Of the 84 male owner-operators in Orange Township all but 5 are married, while of the 55⁹ tenant men all but 7 are married.

In the other township 28 of the 29 male owners¹⁰ are married, and 48 of the 55 male tenants are married.

The average age, at the time of marriage, of tenants in Orange Township was found to be three months greater than that of all landowners, at the time of their marriage. The age for tenants was 25 years and 7 months.

In Lone Tree Township the comparative age was three years less, the average age of tenants, at the time of marriage, in this township, being 24 years and 9 months.

The average size of the owner-operator's family in Orange Township is $5\frac{3}{4}$ persons and for tenants it is $3\frac{2}{3}$ persons, while the corresponding figures in Lone Tree Township are $6\frac{1}{3}$ and $4\frac{3}{5}$.

How Generally Do Farmers' Daughters Marry Farmers? and How Generally Do Farmers' Sons Stay on the Farm?—The number of children in Orange Township 20 years old or older is 104; 54 males and 50 females. Of the males $76\frac{8}{27}$ per cent and of the females 84 per cent are now on the farm or stated that they expected to go back to the farm. Twenty-eight of the 50 females

⁵ This includes 2 housekeepers who are either sister or mother of tenant, while 7 tenants have no wives.

⁶ One of these operators is a woman and one has no wife.

⁷ As noted from the above figures the population in both townships is, for the most part, native born. In both townships, however, the population is largely of German descent, in Orange Township largely Pennsylvania German. These people are commonly known as Dunkards. Those of these who belong to church are members either of the Church of the Brethren or of the First Brethren Church. In the other township there is quite a large German-Lutheran element.

⁸ Seven tenants have no wives.

⁹ This lists the joint-tenants as one.

¹⁰ One owner-operator is a woman.

TABLE I
ECONOMIC CONDITIONS

	Farms with Residences	Operated by Owners		Operated by Tenants		Average Size of Farm Operated by Owner by Tenant	Average Size of Farm Operated by Half Owner		Average Size of Farm Rented by Tenant and of Tenant's Holdings		
		Number	Per cent	Number	Per cent		Number	Acres	Number	Acres	Acres
Orange Township	142	86	60.6	56	39.4	139.8 ¹	6	152	6	85.8	61.6
Lone Tree Township	85	30	35.3	55	64.7	253.7	1	240	2	270.0	140.0
Blackhawk County	2,257 ⁵	1,418	62.8	839 ⁶	37.2	—	—	—	—	—	—
1900	2,168 ⁵	1,248	57.6	920 ⁶	42.4	—	—	—	—	—	—
1910	2,071 ⁵	1,152	55.6	919	44.4	158.9	159.0	—	—	—	—
Clay County	1,684 ⁵	953	56.6	731 ⁶	43.4	—	—	—	—	—	—
1900	1,698 ⁵	906	53.4	792 ⁶	46.6	—	—	—	—	—	—
1910	1,651 ⁵	826	50.0	825	50.0	203.2	203.2	—	—	—	—
State	228,622 ⁸	147,305	64.4	79,739 ⁹	34.9	185.9	—	—	—	—	—
1900	217,044 ⁸	133,003	61.3	82,115 ⁹	37.8	156.3	—	—	—	—	—
1910	199,755 ⁸	117,748 ¹⁰	59.0	82,007	41.0	164.0	144.2	—	—	—	—

¹ Including the one-half owner farms.

² Including the tenant-holder farms of the last column.

³ Three of these tenants own 185 acres outside of the township, the fourth owns 160 acres within the township, which is rented, while he himself rents a 240-acre farm.

⁴ These tenants own 572 acres outside the township, an average of 114.4, which they do not operate themselves.

⁵ *Federal Census, 1910, Supplement for Iowa, p. 659.*

⁶ Managers are here included with tenants.

⁷ *Federal Census, 1910, Supplement for Iowa, pp. 649-650.*

⁸ *Census of Iowa, 1915, pp. 641-643.* This census omits farms of less than 10 acres.

⁹ Exclusive of farms operated by managers.

¹⁰ *Census of Iowa, 1915, p. cxv.*

are married. Twenty-one of these, or 75 per cent, are married to farmers.

In Lone Tree Township there are 81 children 20 years of age or over; 47 of these are males and 34 females. Thirty-seven of the males, or $79 \frac{7}{47}$ per cent, and 28 females, or $82 \frac{6}{17}$ per cent, are now on the farm, or stated that they expected to go back to the farm. Of the 34 females 21 are married. Of the females married 15, or $71 \frac{3}{7}$ per cent are married to farmers.

ECONOMIC CONDITIONS

If all the farms in Orange Township that are less than 10 acres in size are disregarded, the average size of farm in the township is 157.2 acres; that operated by owner 150.1 acres; and that operated by tenant 167.8 acres.

The largest land holding in Orange Township is 734 acres, in Lone Tree 892 acres. The smallest farm in Orange Township is $\frac{1}{2}$ acre, the smallest in Lone Tree is 80 acres. The largest tract operated by one man in Orange Township is 480 acres, in Lone Tree 652 acres. In both cases the farm is operated by the owner.

Distance from Trading Center.—The average distance to the family's chief trading center is 4.5 miles in Orange Township and 2.4 miles in Lone Tree Township.

Relationship Between Tenants and Landlords.—Twenty-three of the tenants of Orange Township are either sons or sons-in-law of their landlords. Two others are first cousins of their landlord, and one is a second cousin of his landlord. This makes a total of 26 tenants, or almost 50 per cent, who are related to their landlords.

The relationship between tenants and landlords in Lone Tree Township runs as follows: 1 brother; 2 brothers-in-law; 10 sons or sons-in-law; and 1 nephew, or a total of 14 tenants, or 25 per cent, who are closely related to their landlords.

Tenants Expect to Become Land Owners.—Of the tenants in Orange Township who do not now own land 71.7 per cent stated that they expected to become landowners. Of these 50 per cent expect to become owners through purchase, or through purchase and inheritance, and 21.7 per cent by inheritance only.

The comparative figures for Lone Tree Township are: $77 \frac{1}{12}$ per cent; $56 \frac{1}{4}$ per cent¹ and $20 \frac{5}{6}$ per cent. Only a few of these men expected to both purchase and inherit land.

From Tables I and II it will be observed that in both townships

TABLE II

Township	No. of Land-lords ¹	No. of Land-lords still Farming	No. of Land-lords still Farming in Town-ship	Average Holdings in Acres of these Land-lords in Township	No. of Land-lords Retired	No. Re-tired on Farm in Township	No. Retired Landlords Who once Lived on Farm in Township	Aver. Hold-ings in Acres of Retired Landlords in Township
Orange	55 ²	12	5 ³	241	22	8	15	168.9
Lone Tree	54 ²	12	8 ²	571.5	19	2	12	251.34

¹ Landlords engaged in business or some profession are not listed in following columns.

² One man has three farms, two of which are rented.

the largest landholders are men who are both landlords and owner-operators, that is, men who own two or more farms, one of which is operated by the owner and the others are rented. The second largest landholders are the retired-farmer landlords. Table III shows the ages of these landholders.

Rise in Land Values.—In Orange Township 6935.66 acres, in 48 tracts, changed hands in the five-year period, August, 1910, to August, 1915. These 48 original tracts were divided into 60 parts at the time of sale. In most cases where the tracts were divided the parts were added to other farms. The average selling price per acre for this land by years, for both improved farms and unimproved farms, that is, farms with buildings and farms without buildings, runs as follows: 1910, \$156; 1911, \$163; 1912, \$164; 1913, \$178; 1914, \$188; 1915, \$200. Twenty-five tracts were sold in 1913, 1914, and 1915 up to August 30.

In Lone Tree Township we ascertained how many farms had been purchased in the ten-year period 1906-1915 inclusive, the purchase price per acre and present value per acre, as stated by the owner or tenant on the farm. During this period 31 farms were purchased, a total of 6174.5 acres, or only 436.5 acres less than the present holdings of the land-owning operators. Eight of these men did not state a present price on their land, 23 did. The average cost price for these 23, involving 4494.5 acres, was \$103.82 per acre, and the present value put upon these farms was \$207.26 per acre. Of these 23 farms, 3 were purchased in 1906; 3 in 1907; 3 in 1908; none in 1909; 3 in 1910; 3 in 1911; 1 in

TABLE III

Township	Average Age of Owner Operator		Average Age of Land- lords		Average Age of Landlords still Farming		Average Age of Retired Landlords		Average Time Owners- Operators Have Been Farming		Average Time on Present Farm		Average Time Tenants Have Been Farming		Average Time on Present Farm	
	yrs.	mos.	yrs.	mos.	yrs.	mos.	yrs.	mos.	yrs.	mos.	yrs.	mos.	yrs.	mos.	yrs.	mos.
Orange	50	34	53	2	45	9	58	9	21	11	10	11	10	5	5	8
Lone Tree	47	35	52	2	45	2½	59	10	24	1	14	12	8	4	4	2

1912; 5 in 1913; 1 in 1914; and 1 in 1915, or an average of 5.91 years since date of purchase. Just how closely this rise in land values corresponds to the general rise in prices the writer did not stop to consider.

Hired Help.—In Orange Township 37 tenants have 47 hired men and 11 tenants have 1 hired woman each. Twenty-four land owners have 36 hired men and 8 landowners have 9 hired women.

Twenty-four tenants in Lone Tree Township were found to have 24 hired men and 3 tenants had 1 hired woman each. Eleven of the landowners had 1 hired man each, and one landowner had 1 hired woman.

Period of Ownership.—Farm has been in the possession of family in Orange Township 19 $\frac{1}{4}$ years, in Lone Tree Township, based on 56, out of a possible 85, definite replies, 15 $\frac{1}{2}$ years.

Patronage of Mail Order Houses and Peddlers.—In Orange Township, 58 per cent of the owner operators and 76+ per cent of tenants buy from mail-order houses. In the other township 80 per cent of owner operators and 83+ per cent of the tenants buy from the same source. In both townships, however, the owner operators' purchases per family amount to one and one-third times as much as that of the tenants.¹¹ In both townships the number of families that buy from peddlers and the amounts so spent are too small to be of any real significance, the actual number of families in both townships which buy from peddlers being 16 and the total amount so spent per year being \$99.

ORGANIZATIONS AND EDUCATION¹²

Orange Township

Owners.—Thirty-one owners belong on an average to 2 11/31 farmers' organizations; 30 owners' wives belong on an average to 1 $\frac{1}{2}$ women's organizations. Twenty-five owners carry life insurance; 1 owner's wife carries life insurance. One owner belongs to a lodge;¹³ no owner's wife belongs to a lodge.

¹¹ The writer, basing his belief on various sources of information that he has secured in recent years, is of the opinion that rural people are little, if any, better patrons of mail-order houses than other classes are.

¹² The chief farmers' organizations in Orange Township are: Coöperative Creamery, Coöperative Cow-Testing Association; Coöperative Egg-Marketing Association; Coöperative Threshing Companies; Farmers' Telephone Company. In Lone Tree Township the chief farmers' organizations are: Coöperative Threshing Companies; Farmers' Telephone Company.

¹³ The Dunkards do not believe in lodges of any kind.

Tenants.—Thirteen tenants belong on an average to $2\frac{9}{13}$ farmers' organizations; 18 tenants' wives belong on an average to $1\frac{1}{3}$ women's organizations. Twenty-five tenants carry life

TABLE IV
MODERN CONVENIENCES

TOWNSHIP	ORANGE	LONE TREE
Total Number of Houses	142	85
Size of Home in Rooms	$8\frac{3}{4}$	$7\frac{3}{4}$
Running Water	57	14
Indoor Cistern and Pump	1	5
Bathub	47	15
Indoor Toilet	34	15
Electric Lights	16	5
Gas Lights	47	13
Power Washer	68	34
Electric or Gas Iron	36	14
Carpet Sweeper	76	20
Vacuum Cleaner	75	24
Furnace, Hot Water or Steam Heat	72	18
Telephone	132	74
Refrigerator	55	7
Gas Cook Stove	29	5
Oil Cook Stove	47	39
Pianos	80	18
Other Musical Instruments	1	4
Sleeping Porch	45	9
Automobile	75	49
Manure Spreader	1	68
Grain Elevator	1	30
Gas Engine	1	45
Silo	1	13

Fiske, *The Challenge of the Country*, p. 258, footnote: "Ninety-five and two tenths per cent of the 300,000 rural homes in Ohio last year (1911) had no bathtubs." In Orange Township there are bathtubs in 33 per cent of the homes, and in Lone Tree in 17.6 per cent of the homes.

MacDougall, *Rural Life in Canada*, p. 128: "The Agricultural Survey of 1910 found that in Prince Edward Island 97 per cent of the farm houses obtain water from wells outside the house. All carry the water by hand. In Nova Scotia only 2 per cent of the farm houses have water piped to the house. In New Brunswick 95 per cent obtain water from wells and springs. In English speaking Quebec 92 per cent carry water by hand. These conditions are general."

Orange Township has over one-half as many bathtubs as cars, three fewer modern heating systems, over one-half as many sleeping porches, four-fifths as many homes with running water, and one-half as many indoor toilets. Lone Tree Township has three and one-fourth times as many cars as bathtubs, two times as many grain elevators, three times as many gas engines, and four and one-half times as many manure spreaders.

Iowa has a little better than one car to every 13 persons. Orange Township has one to a little more than 10 persons, and Lone Tree a car to a little more than 8 persons.

¹This not ascertained in this township.

²Twenty-five of these are owned by tenants.

³This includes 1 shower bath.

⁴Of these 11 are organs, 9 violins, 4 accordions, 7 horns, 2 guitars, 1 mandolin, 1 victrola, and 8 phonographs.

⁵Twenty-five of these are owned by tenants.

insurance; 2 tenants' wives carry life insurance. Eleven tenants belong to some lodge; 4 tenants' wives belong to some lodge.

Lone Tree Township

Owners.—Fifteen owners belong on an average to $1\frac{1}{5}$ farmers' organizations; 9 owners' wives belong on an average to $1\frac{1}{9}$ women's organizations. Seven owners carry life insurance; no owner's wife carries life insurance. Six owners belong to lodge; 4 owners' wives belong to lodge.

Tenants.—Twenty-five tenants belong on an average to $1\frac{1}{25}$ farmers' organizations; 11 tenants' wives belong on an average to 1 women's organization. Twenty-one tenants carry life insurance; 1 tenant's wife carries life insurance. Seven tenants belong to some lodge; 1 tenant's wife belongs to a lodge.

The figures in Tables V, VI, and VII indicate that the average education of adults in Orange Township is high. Other figures seem to indicate that there is a still greater tendency in this direction among the young people of the township. Iowa is said to have something over 22 persons out of every thousand of its population in high school.¹⁵ In this township there were, in 1914, 32 persons in high school. Twenty-eight of these young people were 4 was this the fourth year. A very large proportion of these young people stated that they expected to complete the four-year high school course. Thus the fact that so few completed their fourth year in 1914 indicates that there is a rapidly growing tendency for young people in this township to carry their school work beyond the grade school. Eight persons were in college or university.

In 1916 the township completed its consolidated grade school, with a high school attached. This consolidates ten one-room schools. The bonds voted for the erection of the building were sold at a premium of \$915.

The teachers who taught the one-room schools for the year 1915-16 had an average teaching experience of $6\frac{1}{4}$ years. The average teaching experience of the rural teachers in the Central West is less than one-half as long, our state superintendents of public instruction tell us.

On November 1, 1915, only 3 children in the township who had not completed the eighth grade school work were not enrolled in

¹⁵ Iowa Accredited High Schools, 1915-16, *Bulletin No. 5*, State Board of Education. Exact figure, 22.4.

TABLE V
EDUCATION OF PERSONS 21 YEARS OF AGE AND OVER

	Common or Grammar School						High or Preparatory School				College						
	Total	Years						Total	Years			Total	Years				
		4 or Less	5	6	7	8	1		2	3	4		1	2	3	4	
Orange Township																	
Owners	54 ¹	—	3	2	7	42	63	—	2	1	—	3	27 ²	11	7	1	8
Owners' Wives ²	52	—	2	2	10	38	9	—	1	2	—	6	18	5	5	2	6
Tenants	29 ³	2	1	1	3	22	11 ⁴	—	1	4	2	4	18 ⁵	10	5	1	2
Tenants' Wives ⁶	26	1	1	—	2	22	7	—	1	1	1	4	15	4	5	3	3
Lone Tree Township																	
Owners	25	—	—	—	—	25	2	—	—	—	1	1	3	—	—	—	3
Owners' Wives ²	28	—	—	—	—	28	1	—	1	—	—	—	5	1	—	—	3
Tenants	39	1	—	—	1	37	11	—	4	—	1	6	5	1	1	—	3
Tenants' Wives ⁶	36	1	—	—	1	34	10	—	2	2	1	5	2	—	—	1	1
Blackhawk County ⁷																	
Males	12,199	1,136	373	1,280	1,307	8,103	2,711	—	342	708	642	1,019	2,372	845	612	296	619
Females	9,992	446	280	935	962	7,339	3,757	—	499	786	874	1,598	2,471	910	711	339	505
Clay County ⁷																	
Males	3,491	187	107	311	310	2,576	506	—	109	128	78	191	439	171	92	58	118
Females	2,742	62	63	170	213	2,234	706	—	120	100	109	317	357	146	92	64	55
State ⁷																	
Males	559,876	28,570	53,128	55,097	388,028	82,901	15,056	22,736	14,340	30,769	67,036	23,340	16,366	8,165	19,165		
Females	478,199	30,360	16,255	42,891	45,961	342,732	120,699	16,472	27,159	20,772	56,296	57,706	21,249	16,869	7,042	12,546	

¹ Including 2 women operators and 1 operator's family of 2 men.

² Five owners have no wives.

³ Including 1 woman tenant and two instances of 2 tenants to a farm.

⁴ Seven tenants have no wives.

⁵ One owner has no wife.

⁶ Seven tenants have no wives.

⁷ Figures from Census of Iowa, 1915.

8,165

19,165

7,042

12,546

TABLE VI
RELATIVE NUMBERS OF PERSONS 21 YEARS OF AGE AND OVER WITH SPECIFIED EDUCATION

	Total	Common or Grammar School		High or Preparatory School		College	
		Number	Per Cent	Number	Per Cent	Number	Per Cent
Orange Township, Farmers and Farmers' Wives							
Males	145	83	57.2	17	11.7	45	31.0
Females	127	98	61.4	16	12.6	33	26.0
Lone Tree Township, Farmers and Farmers' Wives							
Males	85 ¹	64	75.3	13	15.3	8	9.4
Females	76	63	82.9	11	14.5	2	2.6
Blackhawk County							
Males	17,450	12,199	69.9	2,711	15.5	2,572	13.6
Females	16,257	9,962	61.3	3,757	23.1	2,471	15.2
Clay County							
Males	4,457	3,491	78.3	506	11.4	439	9.8
Females	3,818	2,742	71.8	706	18.5	357	9.5
State							
Males	720,134	559,876	77.7	82,901	11.5	67,036	9.3
Females	693,247	478,199	72.1	120,699	18.2	57,706	8.7

¹ Including one woman operator.

TABLE VII
EDUCATION OF HIRED HELP

	Total	Orange Township		Lone Tree Township	
		Men	Women	Men	Women
Total Hired Help	142	83 ¹	20	35 ²	4
Common or Grammar School					
4 years or less	83	3	—	—	—
5 years	3	2	1	—	—
6 years	8	7	1	—	—
7 years	3	2	1	—	—
8 years	71	36	13	18	4
High or Preparatory School					
1 year	2	1	1	—	—
2 years	6	6	—	—	—
3 years	2	2	—	—	—
4 years	2	1	—	1	—
College or University					
1 year	6	3	3	—	—
2 years	2	2	—	—	—
3 years	—	—	—	—	—
4 years	6	6 ³	—	—	—

¹ Not ascertained in 12 cases.

² Not ascertained in 16 cases.

³ One man is a university graduate.

some one of the eight open district schools of the township.¹⁶ Each of the eight teachers had had some college training.

Attitude on Consolidation.—The township voted on consolidation while we were in the township collecting data. This was the second time the proposition was voted on. Consolidation was given a majority at this election, but it is interesting to note the line-up of tenants and owner operators as revealed to us in collecting data on this proposition. Forty-one tenants favored consolidation, 11 opposed, and 4 were neutral. Fifty-four owners favored it, 12 opposed, 7 neutral, and 13 non-committal.¹⁷

Township Literary Society.—In this township there is also what is known as the Township Literary Society. This meets in

¹⁶ Two of the 10 schools of the township were not opened in 1915-16. The children of these districts were transported to one of the other schools. There were too few children to warrant opening these schools.

¹⁷ Here the joint owners and joint tenants are listed as one, since in each case they took the same position.

what is now used as the Township Hall, formerly a church home of a denomination that has ceased to maintain itself in the township. This hall is located near the center of the township. The society meets every Friday night during the fall, winter, and spring months of the year. To this society belong most of the young people of the township, several of the hired men and women, and some of the farmers and their wives. Of the farmers and farmers' wives group, 10 men and their wives are tenants, and 19 men and 16 women are owners or owners' wives.

*Home Libraries.*¹⁸—Sixty-nine owners' homes in Orange Town-

¹⁸ No library of 8 books or less was listed.

ship have 7355 volumes, or an average of 106.6 volumes, in their libraries. Fifty-six tenant homes contain 5342 volumes, or an average of 95.4 volumes per home. In Lone Tree Township twenty-two owners' homes have 1913 volumes, or an average of 86.9 volumes per home. Twenty-four tenant homes have 1872 volumes, or an average of 77.5 volumes per home.

TABLE VIII
NEWSPAPERS AND MAGAZINES

	Orange Township		Lone Tree Township	
	Owners	Tenants	Owners	Tenants
Daily Papers	96	74	48	54
Homes ¹	76	56	27	48
Weekly Papers and Magazines .	225	168	91	111
Homes ¹	70	56	28	46
Monthly Papers and Magazines	58	110	63	86
Homes ¹	58	47	22	34
Farm Papers ²	192	145	72	72
Homes ¹	65	54	26	37

¹ When the number of homes is less than the number of homes of this group in the township, the other homes received no periodical of the kind specified. But there was no home without at least one kind.

² Farm papers are included in the other three classes, so the total number of periodicals received is indicated by the sum of the first three lists.

Mortality Statistics.—The total deaths in all families in the townships were: Orange Township, males, 25; females, 24. Lone Tree Township, males, 10; females, 14.

CHURCH AND SUNDAY SCHOOL CONTRIBUTIONS

Orange Township.—Sixty-three owners' families contribute \$3371, or an average of \$53.50 each to church support, 2 additional men contribute their services free of charge; 55 owners' families contribute \$681.50, or an average of \$12.39 each to Sunday school; and 44 owners' families contribute \$1632, or an average of \$37.09 each to other benevolences.

Fifty-five tenant families contribute \$1367, or an average of \$24.86 each, to churches; 30 tenant families contribute \$242.20, or an average of \$8.07 each, to Sunday school; 35 tenant families contribute \$810, or an average of \$23.14 each, to other benevolences.

Lone Tree Township.—Twenty-three owners' families contribute \$1118.66, or an average of \$48.64 per family per year, to the

TABLE IX
CHURCH MEMBERSHIP OF OWNERS, TENANTS, AND WIVES

	Orange Township				Lone Tree Township			
	Owners' Homes		Tenants' Homes		Owners' Homes		Tenants' Homes	
	Men	Women	Men	Women	Men	Women	Men	Women
Roman Catholic	7	6	5	6	4	5	5	4
Church of the Brethren . .	34	37	22	23	—	—	—	—
Presbyterian	2	1	3	—	—	—	—	—
Methodist Episcopal . . .	3	9	5	4	2	3	2	7
Progressive Brethren . . .	5	5	4	5	—	—	—	—
Baptists	1	3	5	4	—	—	—	—
Lutheran	1	1	2	2	7	7	6	5
Evangelical Lutheran . .	—	—	2	1	1	1	1	1
Danish Lutheran	—	—	—	—	1	1	3	3
German Lutheran	—	—	—	—	5	5	6	5
Friends	—	—	—	—	—	—	1	1
Nameless Church	—	—	1	1	—	—	—	—
Christian	—	—	—	1	1	1	—	—
United Brethren	1	—	—	—	—	—	—	—
Seventh Day Adventist . .	—	—	—	—	—	—	2	2
Totals ¹	54	62	49	47	21	23	26	28

¹ Out of 142 men on farms in Orange Township 103 were church members, and among the women, 109 in a total of 130. In Lone Tree Township 47 out of 84 men and 51 out of 77 women were church members.

church;¹⁹ 7 families contribute \$86, or an average of \$12.28 each, to Sunday school; and 2 families contribute \$26, or an average of \$13 each, for other benevolences.

Thirty tenant families contribute \$532.87, or an average of \$17.77 each, to the church; 7 families contribute \$52.96, or an average of \$9.57 each, to the support of Sunday school; and 2 families contribute \$65, or an average of \$32.50 each, for other benevolences.²⁰

SUNDAY SCHOOL MEMBERSHIP

Orange Township.—Fifty-two owners belong to Sunday school; 53 owners' wives belong to Sunday school.

Twenty-eight tenant men belong to Sunday school; 33 tenants' wives belong to Sunday school.

Lone Tree Township.—Two owners belong to Sunday school; 2 owners' wives belong to Sunday school.

Six tenant men belong to Sunday school; 6 tenants' wives belong to Sunday school.

SOCIAL CONDITIONS AND THE SOCIAL MIND

The Social Mind.—It is not within the time limit of this paper to consider the data collected that reveals the social mind of the people in these townships. Only a few of the more important questions asked each farmer, in this connection, can be cited. Many remarks made by the farmers' wives and children were recorded along with those of the farmers. By far the greater majority of these remarks clearly indicate the feeling and thought of the person making them, and are not merely passing remarks or remarks that mean nothing. From a sociological standpoint this part of the survey is probably the most important.

The more important questions asked were: (1) Do the farmer and his wife take any part in their children's games? What are the results? (2) Are the children encouraged to join clubs and societies of various kinds in the community? (3) Are the children given any holidays or half-holidays which they can count as their own, other than Sunday and the regular holidays? How often? How do they spend this time? Does it make any difference in their attitude toward work? What? (4) Is any attempt

¹⁹ If one family that tithes be omitted here, the average for the remaining families is \$19.03.

²⁰ From all the above figures it will be observed that the tenants make a splendid showing for themselves, contrary to a quite popular opinion.

TABLE X
CHURCH MEMBERSHIP OF PARENTS AND CHILDREN

	Families ¹ Children	Children over 10 years		Children over 15 years		Children over 20 years	
		Total	Not Church Members	Total	Not Church Members	Total	Not Church Members
Orange Township							
Both parents, or surviving parent, church member	86	202	22	143	7	94	4
Neither parent church member ²	15	32	32	14	14	4	4
Father member, mother not	1	—	—	—	—	—	—
Mother member, father not	14	26	17	12	7	4	4
No wife	3	—	—	—	—	—	—
No husband	1	4	4	2	2	2	2
Lone Tree Township							
Both parent, or surviving parent, church member	37	129	15	95	12	61	7
Neither parent church member ²	21	19	19	13	13	5	5
Father member, mother not	2	8	8	2	2	—	—
Mother member, father not	7	14	10	14	10	10	6
No wife	1	8	8	7	7	5	5
No husband	1	9	—	9	—	9	—

¹ Families with no children are omitted. In Orange Township there are 19 such families, and in Lone Tree, 10.

² Including all children. Some of these no longer live in the township and some of the others appear also in the parent column.

³ It will be noted that when neither parent is a church member none of the children is a church member.

made to attach the children to the farm by giving them something that is to be their own, and a part in planning the work of the farm, etc.? (5) What in your opinion is the chief cause which leads boys and girls from the farm? (6) Have you any sugges-

tions to offer as to how this can be so overcome that a proper proportion of the most promising and enterprising young people will stay on the farm? (7) To what extent do families visit with each other on Sundays and other days of the week? (8) What do you consider the greatest need of the church today in order that it may (a) interest and help young people; (b) have the widest influence in the community generally? (9) How many picnics, contests, celebrations, fairs, socials, parties, games, etc., were held in the community last year, which were attended by all or part of the family?

Social Conditions.—Social life in Orange Township is a splendid example of what life on the farm can be made to be. This community is not dependent upon the "movies" and other things of the near-by town for its recreation and amusement. The people of the community never get too busy for a full-day or half-day picnic or community gathering, or for some social event at some neighbor's home, the township hall, or the church. They have learned that there is a time for work and a time for play, and that more play often means more work also. In other words, they have learned that men and women, boys and girls, who enjoy life are more likely to enjoy work also than those who get little joy out of living. It is a community where everybody plays when play is the program. They have "things doing," as modern slang puts it, and they do things.

Two illustrations must suffice here. Early each fall the community gives a banquet at which the newcomers, especially the unmarried hired men and women, are guests. At this banquet these newcomers are made to feel that they are no longer strangers in the community. The other illustration is that of two Sunday-school classes. Of the two largest Sunday-school classes in the only Sunday school in the township one is comprised of the unmarried women in the township and the other of the unmarried men in the township. These two classes always participate in a friendly rivalry to surpass each other in numbers. At least once a year each of these classes entertains the other. Early in the summer of 1915, the girls' class treated the men's class to an automobile trip over the county one late afternoon and evening. At the end of the return trip refreshments were served. But the most remarkable thing about the affair was the fact that the Sunday-school superintendent stated on the previous Sunday that on the given day "all hired men and grown-up boys would, without fur-

ther notice, be "let off from work early on that afternoon and meet at the church." That they were "let off" was evident from the fact that there were seventeen cars in the procession that afternoon and evening.

It has no doubt been observed that the writer has made few deductions and has drawn few conclusions throughout his paper. But he now wishes to leave this conclusion with you: If his study, of Orange Township especially, does nothing else it will have been amply justified in that it is an answer to the dual question, "What can rural communities do to increase their own human well-being, and how can they do it?" by telling how one community *has* done and *is* doing it.

SOME RURAL SOCIAL SURVEYS—DISCUSSION

PAUL S. PEIRCE.—During the past four years three surveys similar to those just described have been made under direction of the department of economics and sociology at the State University of Iowa. The size and general character of the units were the same: namely, two rural townships containing no towns or villages, and one township containing a village of some 560 inhabitants, which, however, was not embraced in the survey of rural conditions. Though planned independently and differing somewhat in detail and emphasis, these university surveys were much the same in scope as those directed by Professor Von Tungeln. But the method of procedure was quite different, since each of our surveys was made by a graduate student, who had lived for some time in the township studied and whose local interest and acquaintanceship were determining factors in the selection of the particular units for investigation. After study of the general literature of rural economics and sociology and examination of the few surveys which had previously been made in other states, these men were assisted in drawing up an outline and a questionnaire. Thus equipped, each undertook a house to house canvass of his entire township. Information so gained was supplemented by examination of state and federal census materials, public records at the county courthouse, books of township and district school officials, records of teachers, of pastors and Sunday Schools, newspapers, and other miscellaneous sources. Personal observation of institutions and conditions, as well as interviews or correspondence with persons in position to speak authoritatively on special points, yielded additional data. Each of these young men carried through his investigation with gratifying enthusiasm, determination, and care.

Their fields presented some noteworthy contrasts to those selected by Professor Von Tungeln. All three townships are in the southern or southeastern parts of the state. They are areas of older settlement and cultivation, of somewhat lower average fertility, of slightly smaller farms (averaging 132 acres), of populations in which the foreign element is even less significant than in Orange and Lone Tree townships. In each township the average family is also smaller and in each the total population is less than in 1870. The three townships represent three distinct types. One is a comparatively rough and adverse region bordering the coal-mining section in the southern tier of counties, in which stock raising predominates and corn is the prevailing crop. Another is in the second tier of counties and farther east;

here corn and live-stock have long been the chief interest, but in recent years cattle raising has been declining while there has been a remarkable revival of wheat culture. The third township is doubtless one of the most prosperous and representative mixed-farming areas in eastern Iowa. Obviously some of these communities are less progressive than Orange and Lone Tree townships; possibly some would even be called "clam-like."

A hasty comparison of results of these two sets of surveys reveals many parallelisms and not a few contrasts, some of which are to the advantage of one group and some to that of the other. Any detailed comparison is of course impossible on this occasion. Even if time permitted, the essentially local interest of such details would render their presentation before this national body inappropriate. Rather will my brief remarks relate to broader aspects; to questions as to the method, purposes, shortcomings, and possibilities of such studies.

First of all I wish to commend the method outlined by Professor Von Tungeln for the inauguration, supervision, and execution of rural surveys. Community coöperation with trained supervisors and field experts should yield valuable returns, both in facts ascertained and in the education of the community. I also appreciate the motives which prompted the choice of alert and advanced communities for the first application of the plan. The author of the paper seems, however, to minimize both the possibilities and the profitableness of studies in average and laggard townships. Our experience in southeastern Iowa has demonstrated the possibility of gathering much definite and illuminating information concerning such townships, even without the more elaborate machinery at the disposal of an institution whose major service is to the rural interests of the state and without the generous coöperation to be expected from a community already awakening. Whether such efforts are worth while, depends largely upon the purpose of the local survey. If it is merely to hold up a little mirror before each community so that it may see itself in a true light, then more may be revealed to a community which has open eyes and a sympathetic attitude. If in addition the aim is to afford data for the scientific study of social and economic questions, to enlighten the larger public concerning conditions within their commonwealth, and to afford guidance toward corrective and remedial legislation, then the survey should be applied to as many different types of communities as possible. To be sure no two townships are precisely alike; neither is it possible to say to what extent a given township is typical. And yet no one, I suppose, would seriously propose an intensive study of

every township in the state. Clearly some of the more lethargic and laggard should be included in the list of those chosen for close inspection. If so, their turn cannot await the coming of that fine spirit of coöperation predicted in the paper just read. Nor, if handled tactfully, need the utilization of data thus gathered be regarded as "showing up" the townships studied. The findings of a series of local surveys might well be analyzed, digested, and compared; and the more important features published in monographs or bulletins which would give a true comparative or composite representation of conditions, without identifying exactly the communities referred to.

As a matter of fact, not a little of the usefulness of modern social and economic surveys has been lost through lack of courage to paint the picture true to life. It is right and proper to commend the good features of a community; but it is quite as important to set forth its bad features as well. Another temptation is to try to cover such a wide range of phenomena and so many diverse aspects of the community situation that the project becomes unwieldy and its objectives are obscured. Surveys of this general type are doubtless better adapted to small rural areas than to complex urban centers; but much might be said for more specialized investigations, especially into the economic relations of country life. There is also danger that surveys will degenerate into mere collection and tabulation of facts and figures, without adequate interpretation, without constructive suggestions for the betterment of conditions, even without due attention to sound statistical method. Of course the value of general surveys also depends in no small measure upon sound judgment in the selection of criteria of social well-being and in the relative weight given to the variegated data secured, but who is sure just what are the true criteria of rural well-being? Just what, for example, is the comparative significance of power washers, indoor toilets, and vacuum cleaners? Of water supply, drainage and housing conditions? Of telephones and mail order patronage? Of wages and hours of labor? Of rotation of crops and short-term cash rent systems? By what token and standard are we to decide that Orange Township or any other rural unit has attained the goal of social efficiency?

Despite these numerous questions and pitfalls, the further prosecution of such studies is altogether worthy of encouragement. They should proceed with reference to some large plan and purpose, and should be kept up until they afford an adequate basis for conclusions with reference, not only to the immediate localities sampled, but to

the larger areas of which they are presumably representative. Moreover survey findings should be given the most effective publicity. Their vital lessons should reach the people and not be buried in the libraries of experts. Like other facts gleaned and principles established by economists and sociologists, they could be more largely serviceable if made more readily available for use through university extension agencies; for in many states the extension director is playing a larger and larger part in the moulding of community sentiment and social ideals and is recognizing that many of the problems with which he is to deal are fundamentally economic.

GEO. H. VON TUNGELN.—Professor Peirce raised the question whether or not it is of any great importance to know how many bathtubs and the like the farmers have. In the survey work that Professor Peirce himself directed, and of which he has told us briefly, his graduate students ascertained the number and kinds of papers and magazines that the farmer took, and the number and kind of musical instruments there were in the farmer's home. I am not sure but from a scientific standpoint it is quite as important to know what opportunities the farmer has for taking a bath and of enjoying a modern home as it is to know what the farmer reads and the kind of musical instruments which furnish his musical entertainment.

Then, too, we frequently hear it said that one of the causes for young men and young women leaving the farm is the dearth of modern conveniences in the home. If this is a real cause, is it not worth while for society to know just how far this cause is being removed through the introduction into the farm homes of these conveniences? I believe that many will agree with me in expressing the belief that it is well for society to know more about the condition under which our rural people live.

THE LAND PROBLEM AND RURAL WELFARE

By PAUL L. VOGT

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When sixty or more years ago, advocates of homestead legislation believed that "Uncle Sam is rich enough to give us all a farm," there was little thought that, as age of nations goes, the time was already at hand when the United States would have her land problem in common with other nations, both past and present. Then the land problem was one of getting unexploited land into private hands at little or no cost. So rapidly has the change come that now the problem is one of getting land into operator's hands at any cost. The rumblings of discontent began during the seventies of the past century when Henry George wrote his *Progress and Poverty*. It was continued during the nineties with the populist movement and the demand for free coinage of silver. Changes in production of gold and the rise in prices of farm produce at a time when tenantry had not yet become a national problem quieted for a time the discontent of the farm-owning population. But the shift of farm owners to the villages and the substitution of a tenant class in the more wealthy general farming sections has brought to the front the old discontent in another form and from another group. The landowner is satisfied with the changes taking place. But the successors of the group that during the forties and fifties clamored for free land on which to get a start comparable to that of their predecessors in the older sections of the country, now are demanding that means be devised whereby they, too, may secure a foothold on the land they operate without having to pay a tribute to the descendants of those who arrived on the ground first and who now live in urban communities. The swell of discontent underlying the present demand for rural credit is fundamentally based on the land question. Sooner or later, the real problem will be recognized and then the state must face the task of controlling or solving that problem in the interest of the common good without regard to vested interests or privilege which may have resulted from traditional influence or social change.

The land problem may be considered from several points of view, among the most important of which are security of title, methods and costs of transfer, permanency of holdings, size of holdings, and the relation of ownership to the operation of the land. It is

the purpose of this paper to consider especially certain aspects of the last two of these, that is, the size of holdings and the relation of ownership to operation.

Centralization of ownership of farm real estate appears to be quite marked in certain sections of the country. A recent bulletin from the University of Texas makes the statement that "Half of the farm lands of Texas are included in 2.7 per cent of the farms."¹ Another writer whose works have been widely read mentions the fact that the Texas Land Syndicate No. 3 owns 3,000,000 acres in Texas. The British Land Company owns 300,000 acres in Kansas, besides tracts in other states. The Duke of Sutherland owns hundreds of thousands, and Sir Edward Reid controls 1,000,000 acres in Florida. Another syndicate controls 2,000,000 acres in Mississippi.² Many other similar statements could be given.

The evidence from the records of the United States Census is that these extremely large holdings in areas of general farming are survivals of an earlier period rather than a recent development. During the past decade the size of farms decreased in every division of the United States except in the East North Central and West North Central, and in these divisions the tendency appears to have been in the direction of increase of medium-sized farms rather than of increase in extremely large holdings. The investigations of students of farm management appear to support the belief that the size of farms in America tends to adapt itself to the type of agriculture followed. With the exception of the semi-arid sections of the West, where dry farming is practiced, economic influences tend toward the increase in the number of medium-sized or small holdings. Accordingly, as the transition from extensive to intensive agriculture is continued throughout the United States, the danger of centralization of ownership should become less.

The suggestion has been made that even though individual farms may become smaller, there may be a tendency toward centralization of ownership through purchase of farms widely scattered over a given area. Inquiry of county officials in several parts of the state of Ohio leads to the conclusion that, so far as this part of the country is concerned, no such tendency exists as yet to any marked degree. Consequently, the belief may be accepted that, in ordinary agricultural areas, the problem of size of

¹ University of Texas, *Bulletin* 39, 1915, p. 148.

² George, *Menace of Privilege*, p. 36.

holdings presents no serious menace, except in those areas where such holdings are a survival of an earlier period.

Investigations made by the United States Bureau of Corporations and other agencies indicate a much more serious problem when centralization of ownership of timber, mineral, or water-power resources is concerned. Without going into detail in regard to centralization of ownership of these resources, it is sufficient to suggest that, if a policy of nationalization is adopted for any natural resources, it is justifiable in the case of those which tend to become monopolistic and which appear to be capable of most economic development on a large scale.

Since the facts indicate that, with the exception of timber, mineral, or water-power lands, there is no apparent tendency toward large centralization of ownership of land in the United States; since the results of investigations made by students of farm management lead to the conclusion that the tendency in size of farms is toward the medium-sized or small holding; and since the farm labor situation in the country is such that holdings even smaller than those believed by farm-management students to be most economically efficient will result,—the conclusion is that the real land question is one of ownership in relation to the economic welfare of the people who actually live on the farm.

It is not within the scope of the present paper to consider the tendencies as to increase or decrease in tenantry. This subject has already been carefully studied by others and the facts well presented. The problem now to be considered is the effect of tenantry on the economic and social welfare of the population that actually lives in the country, and the resulting effect on the national welfare.

In approaching the problem, however, it should be recalled that in a large part of the United States the percentage of tenantry is still very low. During the past decade, tenantry actually decreased in twenty of the states and in seventeen of them the percentage of tenantry in 1910 was still under twenty. In the South, where, so far as percentage of tenantry is concerned, the problem is most serious, the apparent increase is thought to be rather an indication of the rise of the colored population to a position of relatively higher independence than an evidence of deterioration. The serious problem presents itself in the great Central Valley, the region of diversified farming, where, though as yet many of the states show a relatively low percentage of tenantry, the increase

is continuous and appears to be based on causes upon which no legislation or other factors have as yet had any influence.

This steady, even though not rapid, increase in tenantry in the East and North Central divisions, particularly in those parts of the territory where land values are highest, indicates the approach of problems most serious for those who will in future actually live on the farms. This increase is occurring in a section of the country already fairly well established in its agricultural methods; and represents the coming of a permanent tenantry and absentee landlordism in the richest and most productive agricultural section of the Union. It foreshadows the coming of social and economic problems in which every statesman should take a deep and abiding interest if America is to be kept free from some of the serious problems which have presented themselves to other countries both in the present and in the past.

It has been contended by some optimistic writers that the nominal increase in tenantry is more apparent than real; and that it represents merely an increase in the number of young men who are renting farms as a preliminary to buying. Recent investigations, however, though limited in scope, indicate that in the more established sections the average age of the tenant class is rising and that from year to year fewer men are crossing the border from tenantry to ownership. According to data supplied by the United States Census for one of the older counties in the state of Ohio, it is shown that over 65 per cent of the tenants were thirty-five years of age or over. Over 35 per cent of them were over forty-five years of age. A study recently made in Iowa indicates that the results for Ohio are typical of other sections of the North Central division. There, it is reported, "The age of ownership is about six years later in life than it was twenty-five years ago. Farmers now make their first payment on land at the age of thirty-four, while formerly ownership was obtained at twenty-eight years of age."³

Since the fact of increase in tenantry is well established, and since most types of agriculture in the United States appear to be adapted to such increase, an appreciation of the significance of that increase is of the utmost importance. In the study of land tenure in Iowa, mentioned above, the author arrives at the conclusion that increase in tenantry may be coincident with a marked increase in wealth on the part of the tenant class. The author

³ Lloyd, "Farm Leases in Iowa," *Iowa Exp. Sta. Bulletin* 159, p. 171.

makes the statement that "The prosperity of the farmer is better measured in terms of the wealth he accumulates than in the kind of tenure he follows."

Immediate results should not blind us to what the ultimate effects will be, since it is these ultimate effects which will be of the greatest social and economic significance. The separation of ownership from the operation of farms involves a division of the total income from the land. The rise in land values, regardless of the fact that farm income investigators show the immediate effect to be a comparatively larger return to tenants than owners, can only mean that ultimately the share of the income that goes to the landlord will increase through rising rents or will become a permanent burden on the land through the price paid for it by the purchaser. The effect in either case is to give to the landlord an increasing and permanent share in what the land produces and to give either to the tenant or to the future purchaser an income which appears to correspond closely to what skilled labor receives in the cities. So long as land ownership does not give to the owner in America a social status as it does in some foreign countries, the tendency will be for prospective owners to purchase land either at a price which will yield a rent return corresponding to interest rates on investments elsewhere or for a return due to the speculative increase in the value of the land. The outlook for the tenant in America is not encouraging so far as incomes are concerned, even though for the time being they are apparently the principal recipients of the benefits of increases of prices of food products. The advantages due to the farm operator that result from the present tendency toward adjustment of wealth distribution between rural and urban communities, tend to go, not to the farmer, but to the farm owner, who may live in the neighboring village or in the city; and the hoped-for increase in economic welfare of the man with the hoe, upon which depends those material comforts which the farming population has so long lacked and which are recognized as the essential foundation of a satisfying standard of living, sufficient to make farm life attractive, is tending to miss the man who deserves it and to pass on to the urban resident. Thus the building of a sound economic foundation for a wholesome rural civilization is being prevented by the increase in tenantry.

Considerable concrete evidence as to the effects of tenantry upon the fertility of the soil and upon farm management is already available. A recent writer in the *Breeders' Gazette* has

pointed out that the Chicago market has for the past ten years shown a steady decrease in the percentage of cars of corn received grading No. 2 or over and a steady increase in the percentage grading No. 3, or under.⁴ A tabulation of farm-management studies in four typical counties in Ohio reveals the fact that for owner-operated farms 75.4 cents per crop acre was spent for fertilizer while for tenant-operated farms the amount was but 54.4 cents. In view of the fact that another tabulation from the same source shows that owner farms had 10.5 cattle units and 18.5 hog units per hundred acres while tenant farms showed but 6.4 cattle units and 13.5 hog units, the conclusion is inevitable that both from the point of view of preserving the fertility of the soil and of the most efficient farm management, the advance of tenantry is disastrous.

In traveling through the various sections of the upper Mississippi Valley one is impressed on every hand with the evidences of prosperity in the open country. The large, well-kept residences, lawns, good barns and other buildings lead one to believe that, after all, there is little to fear from the changes in tenure which the census records show. But a closer view of the subject does not give so attractive a picture. It is a matter of common knowledge that in many of these prosperous communities homes that were once the pride of owner-operators have begun to show the effects of tenant occupancy and the evidence is that the future will show these effects much more vividly than they can be observed at the present time. A study of rural housing made by one of the students of the rural economics department of Ohio State University, through personal visitation and through coöperation of fellow students, revealed a most marked difference in the housing conveniences enjoyed by owners and by tenants. The results showed that 96 per cent of the tenant houses were heated with stoves while but 70 per cent of the owners' houses were so heated; 69.5 per cent of the owners used kerosene for lighting as against 95 per cent for the tenants; 40.8 per cent of the owners reported had kitchen sinks while but 8.8 per cent of the tenant homes were so supplied; 61.9 per cent of the owners had privies more than 100 feet from the well while but 28.9 per cent of the tenants had the same condition; and 89 per cent of the owners had the well more than 100 feet from the barn while but 19 per cent of the tenants had the well thus protected.

⁴ *Breeders' Gazette*, July 22, 1915.

It is unnecessary to give further figures as to this condition. There is evidence on every hand that tenants are not as well provided for as owners. Moreover, there do not appear to be any factors in the situation which promise amelioration. The interest of both owner and tenant is to secure larger incomes from the farm and neither is interested in providing the best living conditions on the tenant-operated farm. Tenants take less care of the owner's house than they would if it were their own and owners are slow to make needed improvements for the sake of the tenant. We are still in the period of development of American agriculture when we are using much of the original equipment of American farms. If the primitive log house or the sod house has been displaced by the more pretentious dwelling, or if the old makeshift barn of pioneer days has been displaced by the red barn so characteristic of the corn belt, these displacements belong still to the period in which farmers were farm owners and home makers. The time is inevitably coming when present equipment will have passed its period of usefulness. Then the real significance of the transition from ownership to tenantry will become apparent. Either old tumble-down houses, the ghosts of a former prosperity, inhabited by a low-grade population willing to live in inferior quarters will survive, or a new type of houses, built for tenants, will appear. Farm owners are not even now providing for their tenants as they would for themselves. Even the United States government has given recognition to the fact that the tenant housing problem is different from the problem of housing owners, by the publication of plans for tenant houses. This public recognition of the existence of the landless type for whom special living quarters must be provided raises serious questions as to what public policy to tenantry should be. Is the effort to adapt ourselves to changes taking place justifiable or should we frankly recognize that the coming of the tenant house means ultimate social disintegration and the appearance in rural life of a population which will, regardless of what their native ability may be, occupy a permanently lower plane in economic life and be compelled by their circumstances to maintain a lower standard of living?

From the point of view of the sociologist, any policy of adaptation to pathological conditions is incorrect. To plan tenant houses is to perpetuate a fundamentally bad condition. The better policy would be to spend the energies of public agencies in removing the causes that have made the appearance of a tenant class

in America possible. Urban communities have long been conspicuous examples of the miserable quarters that have been provided for employees by certain manufacturing interests. Mining companies in many parts of the country have contributed their share of housing problems by the type of structure they have deemed good enough for the laboring man. To the present a high degree of contentment has existed in the open country so far as relation to property is concerned. But with the advent of distinct and conspicuous differences in housing conditions for the tenant and owner groups will come rural discontent and the foundation will be laid in the open country for the spread of those ideals as to property ownership which have characterized the laboring groups in the city; and we may witness a powerful stimulus to the movement for the nationalization of land.

It is impossible to present concrete evidence as to the effect of increase of tenantry upon the improvement of roads, drainage projects, community beautification, rural economic organization, or any of the other developments which go to make a community environment worth while. It is in accord with the evidence as to policies of improvement of tenanted farms to expect no great degree of enthusiasm on the part of an absentee landlord for the expenditure of money for community improvement.

The effect of tenantry upon education has been brought out in a number of studies. In a survey made in southwestern Ohio it was found that but 42.8 per cent of the tenants subscribed for farm papers while 57.9 per cent of the owners took agricultural journals. In a survey made in Missouri it was found that 10.4 per cent of the owners had a college education while but 5.1 per cent of the tenants had been so trained. The children of owners and tenants showed a much more marked discrepancy as to education than did the farmers themselves. Of owners' children 32.7 per cent had completed the district school while but 12.7 per cent of the tenants' children had done so.

These discrepancies in education are not to be taken as criticisms of the tenant group. They are the result of conditions over which the tenant has little control and which permanently handicap the children of the transient land operator. The social effects of lowered educational efficiency can only be measured in terms of the lowered effectiveness and standards of living of the tenant population.

Increase in tenantry makes more serious the problems of the

rural church. In southwestern Ohio it was found that, whereas 41 per cent of the farmers in a given community were tenants, but 22 per cent of the tenants interviewed were church members. The percentage of church membership for the entire adult rural population was about 39. Thus we have strong evidence that the tenant group is not being reached by the church and that the church is moving up and out of the country with the owner population. In the Missouri study noted above, the percentage of owners attending church services was 40.7 while the percentage of tenants attending services was but 29.6. Sunday-school attendance showed a similar discrepancy and of contributions to the support of the church the owners' share was \$11.62 per farm per year while that of the tenants was but \$4.47.

The relation of the tenant problem to social organization is no less marked. The transient tenant has less interest in community affairs and is not to be depended upon to assume leadership in farmers' organizations nor to become an active factor in stimulating community social life. This is true in part because of the antagonism in the country to the leadership of the newcomer, particularly if he is a tenant farmer. The feeling on the part of the tenant that he has no place in the real direction of community affairs lessens his interest in social life and increases whatever individualistic and anti-social tendencies he may have.

In the past fifteen or twenty years, the Central Valley has witnessed a marked rise in the number of family reunions held in rural districts. The renewed importance of the consciousness of family connections has a close relation to economic changes taking place. During a large part of the past century family connections had little to do with one's social standing, particularly in pioneer communities. People came from all parts of the country to settle the new land and personal worth went far toward determining the social position of those making up the aggregation. Family consciousness and material success go together. The family reunion has been the occasion of renewed social life, but it has represented a renewal that from the community point of view does not promise the largest group unity.

The growth of the coöperative movement among farmers in Europe has brought to America a realization of the large possibilities of development of a better agriculture and rural life here through more effective organization. Effective organization has been shown by experience to depend upon intelligence, homogeneity

of population, stability, intimate acquaintance, and community of social interests. Increase in tenantry destroys every one of these necessary bases of successful organization and unless some policy is adopted which will lead to permanency, homogeneity, and stability, the outlook for effective economic organization in America is not good.

The tenant consciousness is not yet marked in any part of the country. Newspaper accounts of organizations of farm tenants in Iowa and in some of the southern states have appeared. In the West the syndicalist movement has taken root among farm laborers, who according to conventional standards, occupy a still lower status than do the tenants. But beyond these sporadic evidences of class consciousness little is to be found except individual reactions as expressed from time to time in newspaper articles or in personal conference. As conditions become more acute the probabilities are that the common interests of both the tenant and the farm laborer groups will seek expression through organization.

The experience of the race appears to justify the private ownership of land by the operator thereof for the reason that such ownership tends to preserve and to improve the property held, and to insure its most efficient use for society. If the principle is accepted that private ownership of farm lands by the operator is desirable for the social good, then it follows that constructive measures should be taken by the state while the problem is not yet acute to prevent the rise of either a permanent tenant class or of a permanent proletariat in the country. Alleviative policies, such as planning tenant houses, or devising tenant contracts, cannot offer a permanent solution of the problem. The tendency toward tenantry can only be controlled by adequate legislation to correct the influences causing the tendency.

The passage of the recent rural credits law is a step in the right direction. But such a law, without accompanying legislation to prevent land speculation is likely to result in increase in land values, thus depriving the prospective purchaser of the intended benefits. The passage of a law providing for land appraisal boards empowered to determine the price at which land should be sold has been suggested. Such legislation has been utilized in foreign countries with success but it appears that the existence of such boards in America would be ineffective for the reason that, unless they had compulsory powers, the owner of the property could not be compelled to dispose of his property at any

price lower than the one fixed by himself. Land appraisal boards with compulsory powers would amount practically to land nationalization, a step which America is not yet ready to take.

The most hopeful solution appears to be the control of tenantry through the exercise of the taxing power. If the tax were so adjusted as to give a strong inducement to the prospective absentee landlord to dispose of his land to the prospective tenant, much of the speculative holding of land would be quickly eliminated and prices of land to prospective purchasers would much more nearly equal their productive value. The inducement to transfer investment from land to other forms of property would work no great hardship to the owner because under the rural credit law land mortgage bonds would be available as well as other types of securities the absentee ownership of which does not bring such serious difficulties in business management as does the absentee ownership of land.

It is not the purpose of the economist or the sociologist to injure anyone through recommending legislation that may unnecessarily interfere with individual interests. He believes in social adjustment that will yield the largest measure of the common good. If present tendencies may ultimately carry to the country some of the serious social and economic problems of the city, he is justified in advocating remedies which may appear radical but which in the long run offer promise of permanent contentment in rural life and which promise the perpetuation of those social and economic institutions which have been demonstrated by the experience of the race to be of the greatest social utility. It is in this spirit that attention is again called to one of the greatest problems awaiting solution in American life at the present. The control of the situation demands state action as well as individual education and those who make up the membership of such bodies as those gathered here can exert a powerful influence toward the wise solution of the problem.

THE LAND PROBLEM AND RURAL WELFARE—DISCUSSION

W. O. HEDRICK.—The fundamental relation of farming to our national life is borne witness to through the fact that both the aspects of land which Professor Vogt discusses have been the subjects of statistical interest for many years. The public has become only recently interested in the size of business generally, but since 1890 our census bureau has collected statistics relative to the size of farms. Speaking generally the public cares not at all whether factories and stores and railroads are rented or are owned by their operators, but it has given much attention to the ownership and rental tenure of land since 1880.

The curious fact is revealed by the last census enumeration (1910) that it is the very large farm which has been notable during the past ten years. The farms of from 500 to 999 acres have had second place in growth of numbers, have exceeded all others in absorbing total farm area, have exceeded all others in enlarging improved acreage per farm, have shown the biggest increase in value of total farm property of any class, were second greatest in increased building valuation, have had greatest increase in machinery valuation and third greatest in live stock increase. The relatively small number of these farms, however, robs this record of much significance in characterizing American farm sizes.

With regard to landlordism and tenantry, the same motive which is relied upon by society to secure effective farm handling, namely, "self-interest," is the very one which stimulates tenants to rent farms. The farm business requires a combination of several factors—notably land, labor, and equipment—for its best success. The extremely high price of all these elements renders it sometimes necessary that two enterprises should combine their factors—one furnishing land, the other labor and equipment—and we have, therefore, the landlord and tenant relation. Farm management studies show almost invariably that tenant farmers make good labor incomes, and no little care should be taken in disturbing a system not adverse to public policy which with all its faults is distinctly profitable to the farmer.

Country life improvement may indeed be hindered in its coöperative aspect, as Professor Vogt points out, by the presence of the shifting tenant; but an even more fundamental wrong may be done by striking at the productivity of agriculture itself in the attempt to eliminate this sort of farmer. Commonly it is assumed that tenancy is a stepping-

stone to ultimate land ownership. The young farmer or the needy farmer may come to own a farm through a preliminary period spent as a tenant farmer, or he may attain full ownership through the mortgage-indebtedness route. Comparing only the more superficial features of these two methods of reaching the same end, we have the following results.

Through having the stimulus to industry which comes from ownership and through directing his business at will, the mortgager is advantaged, but he is limited in his farm operations through having invested his capital in land. On the other hand, the tenant leaves to the landlord the burden of carrying all the unproductive farm parts, such as buildings, fences, lanes, wood lot, etc. He is further advantaged through putting all his capital into live stock and equipment, thus being enabled to operate to the maximum of profitableness. He gains nothing, however, by the appreciation in value of land.

The suppression of tenancy as advocated in the paper which has just been read restricts the young farmer, or the impecunious farmer, to alternatives which may prove hurtful from the business standpoint. The going in debt for a full-sized farm as we have seen is apt to leave the farmer short-handed in the means for the operation of this farm. Another alternative is the little farm—one which he is able to pay for and have some means left over—but every study of the little farm has convinced the student of the utter unprofitableness of this style of farming. Farm machinery is standardized in size to the needs of the full-sized farm; a profitable number of labor hours for men or team can only be found upon the full-sized farm. Insufficient variations of enterprises and too high costs in overhead expenses are only a few of the many reasons given for the unprofitableness of the small farm.

The sharing of the expenses of carrying on a farm business between two parties—one furnishing the land factor and the other the labor and equipment—has afforded a successful farm business in the past and still has merits for the future. We find nothing to justify the belief expressed by Professor Vogt that the landlord share is to grow larger to the disadvantage of the tenant through the income-absorbing power of land. Landlords will doubtless always secure the returns which are possible to them through owning advantageous differentials in land. These differentials tend to become accentuated with the increase in price of farm products but the means have not yet been shown whereby the landlord can wrest away from the renter any share to which the renter is properly entitled.

Tenancy, it may be said in conclusion, has stood the test of experience. We do not mean by this any tenant system—absentee landlordism or rock renting, for example—but good systems have survived. The greatest system of farming in the world measured by the test of endurance is a tenant system. In England all but four or five per cent of the farmers are tenants, yet English farming has given us our leading types of live stock, our best farm practices, such as marling, drainage, rotations, and the measure in acres of our customary farm. On the other hand, among the farm-owning peasants of Continental Europe (other than the extremely recent notion of coöperation) scarcely a single fruitful farm notion has developed. Few breeds of farm animals or practices have been originated. Women customarily do the farm work and the peasant himself is frequently unable to speak the language of the country in which he lives. The test of a system of agriculture is the character of its professional representatives; and without doubt the British farmer, though a tenant, ranks high among farmers everywhere. The constantly enlarging growth in numbers of population in his country make ever-increasing demands upon the output from the farms. This inevitably leads to intensive cultivation with all its expensiveness in land, equipment, and labor. It seems almost unthinkable under these circumstances that a normal tenancy system should not develop here as in England.

JAMES B. MORMAN.—The land problem as conceived by Professor Vogt centers in farm tenancy. The chief points discussed are the size of farm holdings and the relation of ownership to the successful operation of the farm. The evidence presented and the reasoning based upon that evidence aim to show the relation of the land problem to the economic and social welfare of rural communities. Let us briefly examine these two aspects of the land problem.

1. *The size of holdings.*—Some evidence is presented to show a tendency toward centralization of farm land ownership in certain parts of the United States. But this movement it is shown is not general. It is held, in fact, that "extremely large holdings in areas of general farming are survivals of an earlier period rather than a recent development."

From the standpoint of large land holdings there is believed to be no great problem and no menace to rural welfare. If any such tendency toward centralization of farmland holdings had been shown, state

legislation could be suggested as a practical remedy, as applied in Australia and New Zealand, limiting the size of land holdings by individuals and corporations. This limitation prevents land speculation, lowers the price of land, and tends to bring it into cultivation much quicker.

On the other hand, from a review of statistical data it is maintained that there is a tendency "in the direction of increase in medium-sized farms." This fact being conceded, an explanation of it is the spread of more intelligent farming. This has doubtless been due first to a scarcity of farm labor and, secondly, to the work of the agricultural colleges and experiment stations.

The scarcity of farm labor forced the farmer to limit his productive energies to the cultivation of a diminished acreage. The effort to do this, when coupled with more intelligent direction along the lines of intensive farming, brought a realization of the fact that a farmer could procure better returns with less labor from 40 acres well cultivated than from 80 or more acres poorly cultivated along extensive lines.

Very little consideration, therefore, need be given to the topic of the size of farm holdings. Whatever problem there may be connected with it tends to correct itself by means of educational forces set in motion by state and national authority. This brings us, therefore, to Professor Vogt's main thesis, namely, that "the real land question is one of ownership in relation to the economic welfare of the people who actually live on the farm."

2. *The problem of farm tenancy.*—This topic is not discussed from a national point of view. It is conceded at the outset that, in a large part of the United States, farm tenancy has a low percentage as compared with farm ownership. The seriousness of the problem is limited to the great productive corn-belt states. This is a region where farm lands have reached a high state of cultivation, where diversified farming predominates, and where land values for ordinary farming purposes are comparatively high.

But even in this section of our country, many of the states show a relatively low percentage of farm tenancy. At the same time it is contended that the increase in tenancy is continuous "and appears to be based on causes upon which no legislation or other factors have as yet had any influence."

The problem raised in this particular section of the United States is farm tenancy *versus* absentee landlordism. In this case absentee landlordism has a relatively limited economic and social range. The

landlord who leases his farm to a tenant is not a large land-owning aristocrat, but a retired farmer. He has by hard, continuous, intelligent labor produced a competency from the soil without destroying its fertility. He has preserved for posterity to a large extent the natural resources of the soil. He has demonstrated to the world that, under proper farm management, agriculture is an industry which may be made highly profitable. For these results the landowner should be praised and not condemned. The prosperous farmer, however, finally has retired to the village, town, or city to enjoy the fruits of his long labors, or to afford better educational facilities for his family; and here the real farm tenancy problem may be conceived as beginning.

Farm tenancy may be examined from two points of view, namely, an irrational system of leasing farms and the difficulties of acquiring ownership.

The responsibility for the exploitation of leased farms lies almost entirely with the owner and not with the tenant. If a landowner has no more sense than to permit the fertility or wealth-producing power of his land, which is his basic or fixed capital, to be unscrupulously mined by a tenant, he is culpably negligent toward his own interests and those of posterity.

A rational system of leasing farms,—such as is practiced in Great Britain, which favors long-term tenure, protects the tenant in his rights arising from the use of fertilizers and the making of improvements, and gives the owner supervisory interest over the system of crop production and farm management,—not only provides a plan for the most efficient economic use of land for agricultural purposes, but conserves the natural resources of the soil for future generations.

The problem of irrational leasing of farm lands offers no serious obstacle to economic or social progress in its relation to rural and national welfare. It is a matter of education and wise state legislation. This problem has been solved to a large extent in Italy, Denmark, Great Britain, and other European countries. It can easily be solved in our own country when it becomes a real menace. We can pass on, therefore, to consider the other phase of the problem, namely, the difficulties of acquiring ownership of farms by farm laborers and tenant farmers.

To limit the discussion of this aspect of farm tenancy to the productive states of the north central Mississippi Valley region, where farm lands are high in price, would not be fair. The inability of the farm laborer or the tenant farmer to accumulate sufficient money with which

to purchase raw land or an equipped farm seems to be the core of the problem of farm tenancy.

The difficulty of becoming a farm owner, however, varies in different parts of the United States. Some homestead lands are still open for settlement; raw lands in some parts of the country can be bought as low as from \$5 to \$10 an acre; the value of the average cultivated farm lands runs about \$100 an acre; in the corn belt \$200 an acre is not an unusually high price; orchard lands in Oregon and Washington are frequently estimated at \$1000 an acre; citrus fruit and walnut orchards in California are sometimes valued at \$1500 an acre; and recently a correspondent writing from Florida appraised the value of some orange groves at \$2500 an acre.

The difficulties of passing from the tenant class to the farm-owning class are intensified, therefore, in different parts of the country and with different kinds of agricultural production. For diversified agricultural purposes, the man who buys an ordinary farm by paying down part of the cash price assumes a tremendous responsibility as a result of the precariousness of farming as an industry, in meeting interest charges, in the payment of taxes, insurance, and other expenses involved in land ownership. On the other hand, if one pays cash for a high-priced farm, unless he is going into farming for the fun of it, his course is one of doubtful wisdom, because under existing economic and social conditions he could get better and safer returns for his money if invested in good securities at 5 or 6 per cent interest.

It is not a safe assumption that passing from the tenant class to the farm-owning class removes any of the difficulties surrounding modern economic and social life or solves the problem of rural welfare. As a matter of fact it does not. Under a fair system of leasing farms thousands of tenants are providing themselves with an adequate return for their labor alone, where thousands of landowners fail to do so as a return for their labor and capital together.

But assuming that as a rule farm ownership is preferable to farm tenancy, the question is how this change can be brought about. In the United States there is no difficulty whatever in one acquiring the class of land he wants to meet his financial condition. The principal question to be solved, therefore, is, How can one improve his financial condition so as to provide the means of purchasing land? And the answer would seem to be by working and saving.

But if the farm laborer or tenant farmer does not or can not save something from the fruits of his labor, then he can not very well pur-

chase land or a farm. However, the welfare of the state requires that he be made a landowner, then he must be lifted over bodily from one class into the other by means of state aid and in violation of the most elementary economic principles.

But to grant state aid for any such thing would also violate the fundamental law of social progress. It would be an attempt to set aside the natural law of the struggle for existence; it would seek to counteract by legislative enactment the old command, "Thou shalt earn thy bread by the sweat of thy brow." Necessity forces us to toil, and saying the surplus product of labor is the first step in the accumulation of property and becomes a justification of private ownership.

In buying and selling land, the disposal of it to a tenant implies the whole or part of the purchase price in the hands of the tenant as a result of saving. This is a condition which can economically exist. The tenant can become a landowner without state aid of any kind. It is not so much the price of land, but the ability of the worker to earn and save the price, which constitutes the heart of the problem of farm tenancy.

But the writer of the paper under discussion is himself in doubt about his own position on the price of land. He gives no note of positiveness to his statements. He ends up with saying, "*if a tax were so adjusted,*" and "*if present tendencies were bringing serious problems,*" then the reformer is justified in advocating radical remedies. But no remedy, radical or otherwise, is positively stated or suggested, unless it is contained in the statement that "the control of the situation demands state action as well as individual education."

The causes of farm tenancy, therefore, lie deeper than the mere price of land, and they are practically beyond the reach of legislative enactment. Professor Vogt himself believes that state policies may alleviate the problem of farm tenancy but can not solve it. How the problem is to be solved is not apparent.

In dealing with the problem of farm tenancy we should not lose sight of the fact that fundamentally the causes of the problem are biological and not political. Let us not forget that the soil is the source of human slavery. In procuring subsistence the problems of life begins; therein the problems end. But in the course of life between the beginning and the end arise all our economic, social, and political problems. For centuries man struggled against the forces of nature which enslaved him to the soil; for many other centuries he struggled against his stronger fellow man who had bound him to the

soil. And when at last in his struggle toward liberty he found himself unshackled from the chains of chattel slavery, it was only to realize that what is called civilization, or social progress, had forged other chains about him which enslave him none the less. Neither the tenant nor the landowner is free. Besides the law of necessity which forces him to bear the heat and burden of the day, direct and indirect taxation deprive him of an ever enlarging part of the fruits of his labor. So, with the progress of civilization, the difficulty of saving is not lightened. Taxation as a result of economic, social, political, military, and financial conditions tends to enslave the man who is producing wealth from the soil almost as certainly as when under the bonds of chattel slavery.

The trend of modern social life is for the individual to try to escape as much as possible from the arduous physical labor of wealth production. This is especially the case with farming with its long hours of labor, often performed every day of the year, and with the uncertainties of its reward. When to these burdens are added the disadvantages of lack of educational facilities, social isolation, increasing taxation, and high interest rates on loans, the lot of the farmer has not been and is not now an enviable one. While he may have tried to escape his thralldom, society has made every effort to keep him at his task. What the farmer produces society must have three times a day, and everything must be done to keep him at hard labor.

In contrast with the farm, the call of the city is to regular hours of labor, for six days of the week, at a known wage. This is from the standpoint of the laborer and the mechanic. The higher the walks in business, educational, social, military, and political life, the less physical toil is required and the higher the rewards. As soon as they are old enough to leave home, the easier labor of business and professional life beckons to our boys and girls on the farm and they bid farewell to the home in the country. These beckonings have their effect in depopulating rural districts and in over-populating the towns and cities.

And here I wish to read a letter which I recently received. It is from a tenant and sets forth the land problem from his point of view. The letter is as follows:

Under the new law Farm Loan Act, I am anxious for some information in regards how to proceed in getting a loan for buying a farm. I am sincere in this matter, for at present time I am a tenant giving \$1.00 for every \$2.00 that is made. I am farming 120 acres for share rent and am also clerk for our township.

Serving as a renter is up-hill business, for farm help is next to impossible

to get. The day laborer is making more money than the renter at prices we have to pay here in the country in the state of Ohio. The workshops and manufacturing places of Fostoria, Ohio, are offering \$3.00 to \$5.00 per day for labor. With a few exceptions, the laboring man is scarce in our towns. I know of one factory which has lately employed men above 65 years of age and paying them from \$2.25 to \$2.85 per day. So you see the inducements are tempting for a renter to leave the farm. Then in most cases they only work 8 hours per day and are done for the day. We farmers work 10 hours to 12 hours, then have 2 hours of chores per day extra.

With all of the above to consider, we care nothing about leaving the farm providing we own a small farm of our own, so we would not be looking for the landlord to come and say more, more; although it has never happened to me until now. I have been married nine years and have lived nine years on this one farm. But the owner wants to farm it again himself with present prices, who has an advantage in owning his own farm.

Now I will tell you why I do not care to move to town. I am a young man thirty-one years of age and in good health. I have always lived on a farm, married a farmer's daughter, and have two boys. We do not care to take them to town if we can make farmers of them, for that is what is going to handicap this country. The parents are leaving the farms and going to towns and cities; and after that small boy has grown to be a man and learned the city's ways, there is very small hope of that boy ever moving on a farm again.

My parents are owners of a farm and also my wife's people; therefore I can give the best of reference and security. What I now ask for is: How do you go about it to get a federal loan? Is it a personal loan from a federal bank or some other source? I wish you would forward papers of instruction at once. If you have not that power, I wish you would forward my name to the proper official who has that duty to fulfil.

I am very sorry to take your time to read this letter. But it may gain a point for you in your future work to know how there is one farmer boy who is forced to the city, providing we get no federal loan of some kind. I can rent plenty of good farms. But any ambitious man who has any business ability will not make a slave of himself by being a good tenant for the landowner for the best years of our life, when there are different business opportunities in view like there are under the present administration. I suppose there are hundreds of young men who are successful farmers as tenants or renters who are taking the present time under consideration as to what to do about leaving the farm.

Now what encouragement was I able to give this tenant farmer from the provisions of the Federal Farm Loan Act? Very little, unless he could become the nominal owner of a farm by purchase. But in that case he would not be a tenant but a poor landowner with no large equity in his farm. Whether his condition would be improved by a change from the renting to the owning class would be highly problematical in view of the preceding argument.

Now, what is the remedy for farm tenancy? I can see none except education and wise legislation. The roots of the problem of farm tenancy lie beyond the power of these forces to reach; they are the expression of natural law over which man has no control; before them the barrier is raised of *laissez faire*.

But when it comes to a consideration of the effects of farm tenancy on the welfare of the tenants and rural communities, it is the duty of

society through wise legislation to adopt policies which shall make farm life under tenant conditions worth the while, and which shall insure the greatest good to the state by conserving the fertility of the soil for the present and for future generations.

GEO. H. VON TUNGELN.—Professor Vogt has made two statements that I wish to comment on briefly:

1. He quotes from my colleague, Professor Lloyd's Bulletin to the effect that farmers today make their first payment on their farms from six to eight years later in life than did the farmers of twenty-five years ago. It is my impression that both the author and Professor Vogt convey an unfortunate idea through this statement. In the first place comparatively few farmers who bought their first farm twenty-five years ago had had a four-year high-school course and fewer still had had a four-year college course. If we are now right in holding up the ideal of our prospective future farmers, that they take a four-year college course in Agriculture, how can we hope to give them this additional educational preparation, of from four to eight years, and at the same time expect them to make their first payment on a farm as early in life as did those men, their fathers in many cases, who bought their first farms a quarter of a century ago, but who did not carry their educational preparation so far? Also, is it not probably true that business men and men in some of the other professions are starting out for themselves later in life now, due to a longer period of preparation, than men did in these same lines a quarter of a century ago? If this is true then the farmer is not in an unfortunate class as compared with his contemporaries in other fields, as these men seemingly would have us believe.

2. In another part of his paper, Professor Vogt states that, "Of owners' children 32.7 per cent have completed the district school while but 12.7 per cent of the tenants' children had done so." I doubt very much whether these figures will bear the test of careful examination, for from what information there is available it seems that the average age of tenants in this country is probably somewhere between 35 and 40 years, while the average age of the owner is probably somewhere between 43 and 48 years. The average age at the time of marriage for both groups was probably about 25 years. It follows, therefore, that a much larger proportion of the owners' children are old enough to have finished the district school than is true in case of the tenants' children. And from this it follows that unless the percentage of children in each class has been determined on the basis of the actual

number of children in each of the two groups who are old enough to have finished the district school, a thing that Professor Vogt does not tell us, a great injustice has been done the tenant farmers in this comparison.

J. G. THOMPSON.—It is impossible not to be concerned with regard to the conditions that seem to exist in many sections where farm tenancy prevails. We know enough about the situation to know that all is not well. It is to our advantage, then, that Professor Vogt has directed our attention anew to these conditions. At the same time it appears to me that Professor Vogt is generalizing far too widely on the basis of the data afforded or even available. There has been a great deal of talk about the evils attending the growth in farm tenancy in this country, and some good investigation, to the latter of which Professor Vogt himself has contributed notably. But this is a very large country and conditions vary greatly from place to place; and there is a great temptation to extend, to the country as a whole, the conclusions properly enough drawn from investigation in one section or in a few sections, and applicable in this limited way.

I may give an illustration of what seems to me the tendency, on Professor Vogt's part, thus to generalize too widely. He has called attention to the fact that a farm management survey in four counties in Ohio has shown that owner farms have a greater number of animal units per acre than do tenant farms in these same counties, and he concludes from this that the advance of tenancy is therefore disastrous. Now two pertinent remarks may be made with reference to this treatment of the data presented. In the first place, what is the real significance of the fact or facts stated? Is it to our advantage, or otherwise, when there are more animal units per acre? Authorities are not in agreement with reference to this point. There are those who point out that a meat diet is a relatively uneconomical diet. In the second place, investigation in some other sections shows that tenant farms in those sections have a greater number of animal units per acre than do owner farms. The data are evidently conflicting on this point. With but a limited amount of investigation, therefore, as to this factor, should not our conclusions be correspondingly restricted? It appears to me that there are a number of other illustrations in Professor Vogt's paper of this tendency to generalize too widely, and thus to indict a whole system on incomplete evidence.

Again, is the use of the taxing power for purposes of social reform,

as suggested by Professor Vogt, wise? We must, of course, have revenue to meet public expenditures; and if it seems best to take a part of the personally unearned increment in connection with land values for this purpose, then well and good. But is it wise to use the taxing power not primarily for raising revenue but to accomplish some extraneous object? Any one who has given a little study to the matter of taxation knows very well how very difficult it is to provide a tolerable system of taxation even when the eye is kept single to the one purpose of raising revenue. How much more difficult will it be, then, to construct an adequate and passable system of taxation when the matter is complicated by the attempt to use the taxing power so as to accomplish some great reform, admitted, for the sake of argument, to be desirable?

Lastly, whatever be the drawbacks relative to a system of farm tenancy, it would appear that such a system is much more democratic than one which involves a large amount of hired agricultural labor—a condition which would seem to be necessary in many cases if owner farms are to be large enough for efficient operation.

CHARLES L. STEWART.—It seems that a sinister meaning attaches to the fact that tenants who have purchased farms in the North Central states in recent years were older at the time of purchase than was formerly the case. We need not wonder at this. A farm of 160 acres in Illinois, for instance, is now worth \$30,000. This is more than twice the value of the same place a decade or two ago. To attain ownership of an enterprise of such magnitude naturally takes time. It is so in the case of urban enterprises capitalized at equally high figures. Possession of an urban enterprise may ordinarily be acquired by small steps through the purchase of a few more shares. The purchaser of a farm must usually buy the entire property at one time, or at any rate purchase fair-sized tracts. Should we not suppose, therefore, that when a farm is so much more valuable now than it used to be tenants would spend a longer period of years getting the money to buy a place and the experience at farm operation necessary to make it a profitable investment?

The high price of land not only lengthens the period of "apprenticeship" through which the eventual landowner must pass, but it brings pressure in favor of better methods of farming. When an acre of land is worth \$100, rents for \$5 a year, and increases in value \$10 a year, the increment accounts for two-thirds of the annual improvement in the owner's finances as affected by that acre. When, however, this

same acre of land is valued at \$200 and increases in value \$10 a year, as in the previous case, the increment is not so significant. In the latter case the annual rent is say \$10, so that only half of the owner's financial improvement as affected by that acre can be traced to increment. In other words, assuming an even interest rate, a higher price of land must be related to a larger absolute rent. But the annual increment can not be guaranteed to continue. It must ordinarily decline. Certainly it must be of less significance relative to the price of the land, and must, therefore, count less as an inducement to speculative valuation. As increment drops lower in the calculation of landowners, a more insistent emphasis is thrown upon operating returns. The owners then require more efficient farming. Only those operators may run farms who can make them pay.

Efficient farming is, after all, more important than the prevalence of operators of a particular tenure designation. The rising price of land brings a test of efficiency more and more strongly to bear, and operates with striking indifference to the mode of tenure. If owning operators can meet that test more successfully than operators who hire their land, the survival of operating ownership is assured. But whether the survivors be owners or tenants we may be certain that they must be high-grade farmers. From many points of view that is a more important and desirable development.

THE FEDERAL FARM LOAN ACT

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This paper will discuss briefly the causes and steps leading up to the enactment of the federal rural credits law of July, 1916, the apparent intent of Congress in providing for two distinct farm-mortgage banking systems, the provisions made for safeguarding the proper granting of farm-mortgage credit, the means adopted for creating a form of security that will find ready access to the investment market, and finally the more important benefits that may reasonably be expected as a result of the new system.

Fundamental changes in American agriculture had been going on for many years prior to the agitation for federal rural credits legislation. The western frontier with its free lands had all but disappeared. Growth of population had led to increasing demands upon existing agricultural areas. The relatively extensive types of farming were rapidly giving way to more intensive systems. Increasing land values called for larger amounts of capital invested in land while the more intensive systems of farming made necessary a large increase in working capital. Coincident with these changes, there was in general a falling off in the actual rate of earnings on capital invested in farms. The returns from capital in the more highly developed agricultural regions were especially low. The fact that the earnings of farm capital did not appear sufficient to pay the prevailing interest rates and commissions called special attention to the inadequacy of existing rural credit facilities.

In the search for remedial action it was natural that inquiry should be made regarding improvement in rural credit facilities in the older agricultural countries of Europe. Especially significant in this direction was the action taken at the conference of the Southern Commercial Congress at Nashville, Tennessee, in April, 1912, when it was determined to send a representative body from the various states, later known as the American Commission, to investigate the subject in European countries. In March, 1913, President Wilson gave further impetus to this movement by appointing, for a similar purpose, the United States Commission. These two commissions sailed for Europe in April, 1913, and jointly collected a considerable amount of valuable information, which was largely embodied in Senate Documents No. 214, 261,

and 380, Sixty-third Congress. Senate Document No. 380 also contained a draft of a proposed rural credit law which was introduced into Congress as the formal recommendation of the commission under the name of the Moss-Fletcher, or Commission, Bill. This bill authorized the establishment under federal supervision of relatively small and independent joint-stock land banks which were intended to make loans direct to farmers on first-mortgage security and issue bonds based on such mortgages as collateral and on their capital stock. As originally proposed, these land banks might be organized with a minimum capital stock of \$10,000, but this minimum was later raised to \$100,000.

While information and suggestions were thus being supplied to Congress with the aid of studies conducted in Europe, the Secretary of Agriculture inaugurated an investigation of existing rural credit conditions and facilities in the United States. The results of this investigation were embodied partly in bulletins issued by the Department, partly in the annual reports of the Secretary, and partly in hearings before the Congressional Committees on Banking and Currency. These results were also utilized in informal coöperation with members of these committees.

The Congressional Committees on Banking and Currency conducted extensive hearings on both mortgage and personal farm credit during the years 1913 and 1914 and again in the fall of 1915. As a result of the work of these committees, there was formulated and introduced into Congress what became known as the Hollis-Bulkley, or Committee, Bill. This bill provided for not less than five regional federal land banks, each allotted its own exclusive territory. Farmers desiring loans from such land banks were not to obtain the loans direct, but would be compelled to become members of local farm-loan associations through which the loans would be obtained from the federal land banks. Mainly because of disagreement in Congress with reference to the matter of federal aid in providing rural credit facilities, the whole subject was referred to a joint congressional committee on rural credits in the spring of 1915. This joint committee agreed upon a bill on January 3, 1916, which bill underwent certain changes at the hands of conferees appointed by both houses and was then passed by the House June 27, by the Senate June 28, and was approved by the President July 17, 1916. The present law, as thus enacted, provides for a federal land-bank system embodying the leading features of the Committee Bill and also authorizes joint-stock

land banks, conforming in the main to the provisions of the Commission Bill. Inasmuch as recognition is given to these two distinct land-bank systems, the law has sometimes been characterized as a compromise.

Compare briefly the two classes of banks provided for in the present law. The joint-stock land banks are independent joint-stock companies with a minimum capital of \$250,000, each operating in not more than two states, and entirely dependent upon private investors for subscriptions to its capital. The federal land banks are interrelated regional institutions, twelve in number, each allotted an area prescribed by the Federal Farm Loan Board. Their prompt organization is assured by the provision that the federal treasury shall subscribe what is necessary to furnish the minimum \$750,000 capital stock for each, if private investors do not take up the stock within thirty days after the subscription books are opened. The farmer within the territory of a joint-stock land bank will have direct access to that bank, just as he has to existing banks or mortgage companies. To obtain a loan from a federal land bank, however, the farmer will be compelled, during the first year at least, to become a member of a local farm-loan association. In the case of a joint-stock land bank, no restriction is placed on the absolute amount of a loan nor on the purpose for which the proceeds of a loan may be used. A federal land bank, on the other hand, will not be permitted to make a loan in excess of \$10,000 nor for purposes other than those specified in the act.

The character of the business to be done by joint-stock land banks and federal land banks will be similar, however, in a number of respects. All loans must be made on first-mortgage security. No loan may exceed 50 per cent of the appraised value of the farm land and 20 per cent of the value of the permanent insured improvements. Loans must run for a period of not less than five nor more than forty years and be repayable in equal annual or semi-annual installments, so calculated that the debt will be extinguished at the end of the period. Loans must have an interest rate not exceeding 6 per cent and not exceeding by more than 1 per cent the interest rate on the latest bond issue. Apart from the sale of capital stock, both kinds of land banks will raise their money from the sale of bonds secured by farm mortgages and having a rate of interest not exceeding 5 per cent. All land banks organized under the act will be under the general supervision of the Federal Farm Loan Board of the Treasury Department.

In making provision for these two systems of land banks it was apparently the intent of Congress to meet two distinct credit needs among farmers. One way to improve credit conditions is to improve the security on which credit is based; but even with good security it is necessary to put the credit obligations into suitable form and market them to advantage. Some farmers are already in a position to furnish satisfactory security, while others are greatly in need of improvement in this respect. The federal land-bank system, with its local farm-loan associations, is designed for those farmers who are in need of improvement in their security as well as in the form of their credit obligations and the facilities for marketing them. The joint-stock land banks are intended for such farmers as are able to furnish adequate security and are interested in obtaining loans on better terms with as few restrictions as possible. A clear understanding of the distinction here drawn between the two classes of farmers must be kept in mind in order to appreciate the purpose of providing for two distinct land-bank systems.

In attempting constructive action for the benefit of the two classes of farmers here referred to, the most difficult problems were naturally presented in the case of those who were in need of improvement in their security as well as in the form of their credit obligations and the facilities for marketing them. Large numbers of farmers are thus situated, however, especially in the South and West, and the high interest rates and commissions which these farmers have been compelled to pay on such loans as they have been able to obtain made it imperative that they be given special consideration. It was felt that if legislation were to be justified at all it should apply to those in greatest need. Even in the case of these farmers, it was at no time contemplated to encourage the extension of credit without adequate security. The main question was to determine ways and means by which such farmers could furnish such improved security as would entitle them to credit on a sound investment basis.

In the discussion looking toward the solution of this problem there was manifested a demand for varying degrees of government aid. The most direct proposals for government aid involved the making of loans direct to farmers from government funds at a very low rate of interest. This issue, which reached its climax in the McCumber Amendment as passed by the House in the spring of 1915, led, as already stated, to the appointment of a joint con-

gressional committee on rural credits and to the postponement of legislation until the next Congress.

In the law as finally enacted in 1916, the principle was definitely accepted that the relation of the federal government to the system should be that of encouraging and assisting in the establishment of the necessary land-bank facilities and in supervising the same; and that, aside from such assistance as might be necessary in perfecting the machinery, as hereinafter explained, the government's cash or credit should not be utilized for the improvement of farm credit. How, then, was improvement in the security of farmers who needed such improvement to be effected?

The answer to this question is found in the adoption of the principle that the farmers themselves, through a degree of collective endorsement or guarantee, would be enabled to supply the necessary improvement in their security. In other words, collective liability, as applied in the leading rural credit systems of Europe but modified to meet as nearly as practicable the disposition and situation of the American farmer, was made an essential feature of the new system. The form of machinery designed to accomplish this is seen in the farm-loan association, which was made an integral part of the federal land-bank system. The only alternative to the local farm-loan association, namely, the local agent, provides the same degree of added guarantee or endorsement from a responsible and acceptable third party and thereby insures a corresponding degree of improvement in the farmer's security.

It has been noted that one of the important distinctions between the joint-stock land banks and the federal land-bank system lies in the fact that the prompt establishment of the latter is assured, inasmuch as government funds will be drawn upon, if necessary, to supply the initial capital, whereas the organization of the joint-stock land banks must await the initiative of private investors. This distinction was based on the assumption that private initiative could in general be relied upon to establish such land banks as would meet the requirements of farmers who as individuals were in a position to furnish adequate security for their loans. On the other hand, the relatively more difficult situation which the federal land-bank system was designed to meet made it seem highly improbable that the necessary private capital would be forthcoming to inaugurate the system, and provision for the use of government funds in perfecting this machinery was there-

fore made in a manner similar to that which insured the prompt establishment of the federal reserve banks.

It now appears likely that such joint-stock land banks as may be organized under the act will be located for the most part in the more highly developed areas where a profitable volume of loans from farmers with adequate security may be expected. On the other hand, the present demand for information regarding loans from federal land banks and the organization of local farm-loan associations comes mainly from the South and West, where the need for improvement in the farmer's security is most apparent.

Another important distinction also noted between the joint-stock and federal land-bank systems consists in the fact that farmers who individually possess adequate security will have direct access to a joint-stock land bank just as they now do in the case of an ordinary bank or mortgage company, whereas farmers needing improvement in their security will be obliged to obtain this through membership in, and the endorsement of, a farm-loan association or, under certain conditions, the equivalent guarantee from an agent. In general, it may be stated that all the main problems confronted in the work of joint-stock land banks are also present in the case of federal land banks; but the federal land banks, in addition, are confronted with problems in connection with the improvement of the farmer's security. Practically all the problems involved in the provisions of the present law arise either in safeguarding the proper granting of farm-mortgage credit or in providing the form of security needed to reach the investment market.

Consider first the matter of safeguarding the proper granting of farm-mortgage credit. There undoubtedly will be room for differences of opinion regarding the propriety of the provisions bearing on this as applied to the joint-stock and federal land banks. For the farmer with adequate security, the door to a joint-stock land bank, if there is one in his territory, is left wide open. He may borrow as much as the bank cares to lend him, subject only to the relation fixed between the loan and the underlying security. He may also use the money for any purpose he desires. The latter provision has been criticized on the ground that it will lend encouragement to speculative loan business. On the other hand, it is to be noted that the organization and management of joint-stock land banks will be similar in many respects to that of existing national banks, whose loans are likewise in large

measure free from legislative restriction as to amount or purpose. Moreover, inasmuch as the inauguration of joint-stock land banks is left entirely to private initiative and private capital, the question which appears uppermost for such institutions is to insure their safety as bond-issuing institutions, just as federal incorporation and supervision aim to insure a high degree of safety in the case of national banks.

The question becomes quite different in the case of the federal land-bank system. Here it is undertaken to establish improved farm-mortgage credit facilities for the benefit of the farmers in greatest need in all sections of the country; and to this end provision is made for twelve regional land banks, each with a minimum capital of \$750,000, the entire amount of which will, if necessary, be subscribed from funds in the federal treasury. Clearly, the use of public funds thus proposed must rest on the performance of a recognized public service, such as the general improvement of American agriculture, and cannot be countenanced if, through lending encouragement to a speculative loan business, it fails to perform such service. Where assistance is thus given by the federal government in the establishment of improved credit facilities, it may rightly be assumed that such restrictions should be applied as will lead to general agricultural improvement. As a matter of fact, all provisions and restrictions that may thus be applied to credit extension in the interest of general agricultural improvement are, broadly speaking, subordinate to the one principle of "safety first" in farming. Thus the restriction of loans to productive farm use is essentially a far-reaching means of preventing unwise use of farm capital. Stated another way, prevention as applied to speculative or unprofitable uses of farm capital is an essential feature of safe farming. If the losses due to unwise uses of farm credit could be estimated, they would run far into the millions. A reduction in such losses through intelligent prevention is one of the greatest needs of farm credit. The need for such prevention becomes all the more important as the amount of capital per farm increases.

The extent to which the use of farm credit is misdirected varies among farmers in different sections. Generally speaking, farmers in the more highly developed agricultural areas are applying the "safety first" principle more than those in the other sections, partly because they generally possess a better knowledge of farming requirements and partly because these areas are ordinarily favored by natural conditions.

"Safety first" implies adopting the best system of farming for a given locality, and it also implies adopting the best methods in carrying on the processes of the best system. The specific changes needed thus to prevent unnecessary losses and to increase and stabilize earning power may be brought about partly by the addition of capital for improvements such as live stock, improved machinery, or drainage; partly by the addition of land in order to make the size of the farm unit the most profitable; and partly by paying off an old debt that involves a high rate of interest and unsuitable terms of repayment. The changes needed cannot be brought about by encouraging the purchase of land at inflated prices, out of the range of its earning power.

In the determination of the wise uses of farm credit, the counsel and guidance of a voluntary local association of farmer borrowers may be especially valuable. The progressive farmer, who is interested in the use of productive credit, should not hesitate to seek such assistance. Fear of publicity in such matters is perhaps well founded so far as it involves consumptive credit. On the other hand, when credit is sought for productive use, the farmers should rather take pride in having it made known. What has thus been accomplished with the aid of credit and supervisory committees in the Raiffeisen and Landschaft societies of Europe is a matter of common knowledge. No less significant is the work of local building and loan associations in relation to home building in the United States. In all of these the proper granting of credit is carefully safeguarded and important services are performed which, without the aid of associated action, would have to be performed by other agencies at added expense.

Particularly in those cases where improvement in the security is needed, it is important that the extension of farm-mortgage credit should be not only properly safeguarded but economically administered. The services of the local farm-loan association contribute directly toward both of these objects. Its loan committee supplies without charge an appraisal of the lands offered as security. This committee also serves as a check in restricting loans to the objects permitted under the law. The secretary-treasurer of the association performs important services by transmitting approved applications and the necessary papers to the federal land bank, by handling all the funds, and by carrying on the necessary correspondence. He is also required by law to ascertain whether borrowers use the proceeds of their loans in the

manner specified in their application blanks and to report thereon to the federal land bank.

Each member individually subscribes for stock in the association equal to 5 per cent of the face of his loan. The association in turn subscribes for an equivalent amount of stock in the federal land bank. This 5 per cent stock subscription of the borrower is paid back to him at the maturity of his loan and is therefore not in the nature of an extra charge or bonus. It is primarily a guarantee deposit which, together with the additional liability of the stockholders for an equal amount, improves the security for the members' loans. At the same time, the stock also serves as an investment paying such dividends as may be declared. The services thus performed by a farm-loan association, including the selection of loans and the appraisal furnished for the underlying security, the transmittal of blanks and forms to the land bank, the handling of funds, the guarantee added by means of the double liability of the capital stock, and the attention given to the upkeep of the loans, all conduce to the proper and economical granting of credit by the federal land bank. And the federal land bank is enabled further to safeguard the proper selection of loans with the aid of the reports of a salaried government appraiser.

In connection with the discussion of the proper granting of credit by federal land banks, it should be stated that these banks were designed for farmers and not for capitalistic owners of farm lands. There may be a difference of opinion as to the interpretation of the requirement that a borrower must be engaged, or about to be engaged, "in the cultivation of the farm mortgaged." A ruling by the Federal Farm Loan Board will undoubtedly be necessary to interpret this provision. One interpretation would be that the farm owner, regardless of his residence, who shares the hazards of the business with the man who operates the farm, will be entitled to a loan, but that the owner whose farm is solely an investment, yielding a fixed or stipulated return in money or products, could not qualify as a borrower from a federal land bank. Another interpretation would be that only those farm owners who operate their farms, with or without hired help, and who therefore assume all the risks connected with the business, are entitled to loans under the act. This would bar out all farm land operated by tenants whether on a share or a cash rental basis. The former interpretation would undoubtedly enable the federal land banks to obtain a much larger volume of standard loans and thus

give assurance of the financial success of these institutions. On the other hand, the latter interpretation would conform more nearly with the popular interpretation of the act and would give impetus to a transfer of ownership in farm land to actual farm operators.

There is still a further consideration that deserves careful attention in a proper development of long-time farm-mortgage credit. The farmer is in need of such terms of repayment as will enable him gradually to extinguish his debt out of the earnings of the farm itself. The Federal Farm Loan Act makes specific provision for this by requiring that all loans made under the law must contain the amortization feature, that is, they must be repayable in equal annual or semi-annual instalments, so calculated that the loan is paid at the end of the period. This provision has been criticized on the general ground that it is too severe and that the farmers do not want it.

If the provisions regarding the compulsory repayment of loans in periodic instalments were as rigid as some writers assume, the terms undoubtedly would be deserving of adverse criticism. However, a careful reading of these provisions shows that the borrower is given a very wide range of choice with reference to the manner of repayment. If the term of the loan is made forty years, the annual payment required for interest and principal exceeds what the interest alone would be by less than one per cent of the principal. With the lower interest rate, this annual payment would probably be less than the interest and commission charges now paid on similar loans running through to the end of the term without any reduction of the principal. And it is not necessary to allow the loan to run for the full term, since any borrower under the act has the privilege, after five years, of paying off the entire debt on any interest date, or of making any payment that he may wish, in multiples of \$25, in addition to the required amortization payment. This means that any loan under the act running for more than five years, does so at the option of the borrower. Again, the amortization requirement is criticized on the ground that it gradually reduces the amount of capital at the farmer's command, whereas the capital actually needed constantly increases with the development of farming. The general increase in farm-mortgage indebtedness is also cited as indicative of the farmer's need. As stated earlier in this paper, it is true that the farmer is in need of increasing amounts of capital. And

there is no reason why a borrower under the act may not ask for a reappraisal after the loan has run a few years, and renew or increase his loan. In fact, it is assumed that renewals or increases in loans will be made, as they may be warranted by improvement in the security or by other changes in conditions.

In further criticism of the amortization feature it is contended that the farmer seeks credit, like other business men, because he can make borrowed money earn more than he pays in interest and that he should therefore be allowed the continued and uninterrupted use of capital and not be compelled to repay it in small dribbles. In reply to this argument it may be said that the payment required on the principal, which, as already stated, is very small, may be thought of as a desirable stimulus to thrift for the average farmer, rather than as a disadvantage. Moreover, one of the most difficult problems involved in the attempt to furnish the farmer with a long-time loan at a low rate of interest is to insure the maintenance of a standard underlying security throughout the period of the loan. The necessity of adequately protecting such security in order to meet the requirement of the investment market makes the amortization requirement seemingly imperative in the case of long-time farm-mortgage loans.

The case would be entirely different if the loans under consideration were to run for relatively short periods of time—say from one to five years. For such loans a proper standard could undoubtedly be maintained without the amortization feature. This also suggests that the Federal Farm Loan Act, in its aim to supply improved facilities for farm-mortgage credit, is incomplete to the extent that it makes no provision for farm-mortgage loans of less than five years.

For the present, the task of establishing a nation-wide system under the existing limitations is doubtless all that should be attempted. In time, however, it is to be hoped that farm-mortgage loans of from one to five years may also be included within the scope of work contemplated under the law.

There is one provision in the act which makes it the duty of the Farm Loan Commission to study the various state laws relating to land titles, foreclosures, homestead exemptions, and other matters affecting mortgage securities. The purpose of this study is to determine whether such laws afford adequate safeguards to loans under the act. The federal board is empowered to declare mortgages ineligible whenever the state laws are deemed to afford

insufficient protection. This provision should exercise a desirable influence toward promoting uniformity and standardization in state laws affecting farm-mortgage securities.

A review of the foregoing discussion with reference to safeguarding the proper granting of farm-mortgage credit makes it apparent that all the questions raised are essentially questions of standardization. The provisions affecting the granting of credit all aim to insure a standard security for such credit extension. Thus, the restrictions placed on the purpose and the amount of loans from federal land banks, the means utilized to promote economical administration with the aid of services from the farm-loan associations, the provision for amortization payments on loans, the requirements for reserve funds and for the subscription by borrowers to capital stock, and the provision concerning state legislation, all aid in the standardization of the credit granted under this act.

Consider next the matter of providing the form of security needed to reach the investment market. Here, again, the questions involved are essentially questions of standardization. Under the prevailing practice in the farm-mortgage loan business in the United States, the original farm mortgage and note are sold to the investor. The latter is thereby subjected to certain disadvantages, since he must either have personal knowledge of all the essential circumstances affecting the security in question or he must rely upon a third party for information or protection. If he depends upon his own acquaintance with the conditions involved, he must have intimate knowledge of the farm mortgaged, must be assured of the validity of the land title, and must give attention to the upkeep of payments for taxes and insurance. And he accepts the responsibility of dealing with any irregularity that may arise in payments of interest or principal. A considerable part of the farm-mortgage loans in the United States are held by investors of this class. On the other hand, where the investor does not have the necessary knowledge of the circumstances affecting the safety of a given mortgage loan and is compelled to rely upon the representation or guarantee of a third party, such as a mortgage company or a mortgage bank, he must have knowledge regarding the reliability of the particular mortgage company or mortgage bank. And while many of these institutions have established a reputation for reliability, it is often difficult for an investor to discriminate between those that make reliable representations and those that do not. Moreover, the investor who

purchases an original mortgage and note often finds it difficult to obtain a mortgage for just the amount which he desires to invest; or the period of time for which the mortgage is made may be too short or too long; or the prompt payment of the interest may not be assured to his satisfaction.

Such considerations as these have emphasized the importance of establishing institutions capable of assembling farm mortgages, carefully selected according to reliable standards, and, on the basis of such mortgages as collateral, of issuing bonds in convenient denominations, running for suitable periods of time, and with convenient and reliable means for the collection of payments for interest and principal. As long as the investor purchases the original mortgage and note without the guarantee of a third party, he theoretically buys on inspection, whereas the purchase of a farm-loan bond means buying on grade. This difference between buying on inspection and buying on grade is a very significant one. Its application is familiar in many of our marketing problems. The change from buying on inspection to buying on grade, however, necessitates the promulgation of clearly defined and reliable standards. A buyer of wheat, for example, would want to inspect personally the particular grain offered for sale unless it represented a uniform product which could be adequately described to him by means of a designated grade and unless he had satisfactory assurance that the particular grain actually conformed to the grade designated. However, having given these conditions it is obvious that the buyer would much prefer buying on grade because it would save him considerable trouble and inconvenience.

The same considerations apply in the case of farm mortgages. Being offered a farm-mortgage security conforming to a definite uniform standard and being offered satisfactory assurance or guarantee that the security conforms to the standard designated, the investor would undoubtedly prefer such security because it would save him the trouble and inconvenience of investigating the various conditions and circumstances affecting the original mortgage and note.

Before proper assurance can be given the investor, however, in regard to the quality of farm-mortgage securities sold on grade, as in the case of farm-loan bonds, there are important considerations to be met.

There is still a vivid recollection in the minds of many people, and especially of individual investors and savings institutions in

the New England and North Atlantic states, of the disastrous history of more than 160 institutions which undertook to sell debentures based on farm mortgages in this country during the later eighties and early nineties. The tragic ending of these companies is regarded by some of our present-day writers as a final argument against the proposal to encourage the establishment of farm land banks.

However, the causes for the failure of those early debenture companies are of such a character that they can be successfully avoided under a system of land banks properly organized and supervised. The checkered career of our early banks and insurance companies was in many respects equally disheartening, but the experience thus gained formed the basis for the successful inauguration of government regulation as applied to such institutions. Similarly, important safeguards have been provided for the land banks under the Federal Farm Loan Act to prevent a recurrence of those conditions which led to failure in the early debenture companies. Attention has already been called to these safeguards as applied to the granting of credit under the act. Such provisions should lead to the careful selection of standard mortgage securities and render impossible the use of boom estimates in land values, which assisted in undermining the earlier companies. Attention has also been called to the provisions for capital stock which, with the accumulations required for a reserve, should constitute an adequate protection fund. No federal land bank will be permitted to issue bonds in excess of twenty times the amount of its capital and surplus, while no joint-stock land bank may issue bonds in excess of fifteen times its capital and surplus. These provisions, which are based on the approved practice of the leading bond-issuing institutions of Europe, were entirely lacking in the early debenture companies.

One of the greatest evils connected with the practices of the early debenture companies was the tendency constantly to substitute inferior mortgages for collateral securities withdrawn. Careful provision has been made with a view to preventing any such tendency under the new law. The appraisal system already described and the various provisions restricting the granting of credit aim to insure the selection of standard mortgage securities by the land banks, and the provisions bearing on the duties of the government registrar or trustee are designed to guard against any improper substitution of mortgages held as collateral.

Finally, the early debenture companies were subject to no in-

spection or supervision under state or federal law, whereas the land banks under the new law will be safeguarded by a careful system of federal inspection and supervision. The general administration of the law is vested in the Federal Farm Loan Board of the Treasury Department, which is charged with the duty of designating the land bank districts and cities, appointing a temporary board of directors for each of the federal land banks, and certain permanent officials, including bank examiners, appraisers, and registrars. Even after the federal land banks are ready for permanent organization, having received subscriptions for their stock from farm-loan associations amounting to not less than \$100,000, the federal board appoints three of the nine directors for each such bank, while the associations of borrowers elect the remaining six members. It is evident that very grave responsibility is thus placed upon the Federal Farm Loan Board and that the success of the new system will depend in large part upon how ably and efficiently the board performs its duties. One of the most vital elements for success will be the fitness and energy of the men who are placed at the head of each of the land banks. Only active, experienced, and efficient men will be able properly to develop the business of these institutions. Such men must understand fully the needs and interests of farm borrowers and establish such contact as will enable worthy farmers to take advantage of the new system without being subjected to serious delay; and at the same time they must understand and apply the rigorous standards of a sound and enduring business policy and thus be able to develop and maintain institutions for standard investment securities. Not only will the appointments made by the federal board be of the highest importance, in this connection, but an equally critical choice will be made later when the farm-loan associations themselves elect two-thirds of the managing bodies for the federal land banks. Will these farm-loan associations make their choices in keeping with the requirements of the duties and responsibilities involved? Will they place above all other interests the considerations of efficient administration and the maintenance of uniformly high business standards? Will they be far-sighted enough unfailingly to place the broad business interests of the federal land bank above what in some circumstances of severe pressure might appear to be the immediate interests of the borrowers themselves? Here, again, the supervising function of the Federal Farm Loan Board must necessarily play an important part in the successful development of the land bank.

However ably and well the managing bodies of each of the federal land banks perform their duties, the results of their work will depend largely upon the kind of support given by the local farm-loan associations. And here it seems clear that if the new system is to be taken advantage of by those farmers who are worthy of and in need of improved credit and for whose benefit the law is primarily designed, there will be need of systematic and thorough missionary or educational work. It will be no small task to bring to farmers generally a proper understanding and appreciation of just what the new system aims to do and what it does not undertake to do for the farmer.

The Federal Loan Board realizes the importance of educational work in this connection and is arranging for the active coöperation of the federal Department of Agriculture and of the extension workers in the several states for this purpose.

What then may reasonably be expected under the new system? The borrower, especially in the South and West, who qualifies under the act will undoubtedly obtain a mortgage loan at a materially reduced rate of interest. Borrowers generally in all parts of the country will have better access to a long-time mortgage loan affording convenient terms of repayment. Moreover, they will have a dependable source to which they may turn at all times and be reasonably assured of obtaining such credit as their security justifies. To many borrowers it will seem no small advantage to claim such accommodation as a right without being compelled to beg for it.

In addition to obtaining advantages directly connected with the loan itself, the borrower is confronted with a practical demonstration of the advantages of teamwork in his relations with the farm-loan association. Having found that coöperative effort actually assists him to improve his credit, he acquires a new confidence in the value of coöperation in its relation to the promotion of other interests. At the same time, he experiences a wholesome stimulus to thrift in the requirement that he periodically reduce in some measure the debt he owes to the land bank. Many borrowers will also be greatly assisted in their efforts to acquire ownership of farm homes. The tenant or other landless man who has accumulated some savings should be enabled to arrange for the purchase of a farm by paying a part of the purchase price and meeting the balance partly with a first-mortgage loan under the act and partly with a second mortgage either to the vendor or to a third party.

In mentioning this possibility it may not be out of place to give warning against extravagant hopes for the elimination of farm tenancy. The existence of the tenant farmer in an agricultural economy rests on far deeper foundations than the one question as to what credit facilities are available.

There are also benefits to the investor. He will have ready access to a standard form of security issued in convenient denominations of \$25, \$50, \$100, \$500, and \$1000. The opportunity and inducement for smaller savings than the minimum \$25 bond is also provided. Each farm-loan association is permitted to receive current deposits, giving therefor certificates bearing interest at not to exceed 4 per cent per annum and running for not longer than one year. These certificates are convertible into land-bank bonds when presented to the federal land bank of the district in amounts of \$25 or any multiple thereof.

There is one provision in the law that has been criticized because it contemplates under certain conditions the temporary deposit of funds from the Treasury in a federal land bank. Such deposits, however, if made, would not be different from those now actually placed by the federal Treasury in existing banks. In any case, the Secretary of the Treasury is authorized to use his discretion in making such deposits and satisfactory security must be given by the federal land bank. The law provides that these deposits must not exceed \$6,000,000 in the aggregate at any one time, and that the interest rate paid thereon by the banks must not exceed the interest charged for other government deposits.

Much more important than the provision for government deposits, from the standpoint of both the borrower and the investor, is the provision in the act by which all mortgages accepted and bonds issued under the law, and incomes derived therefrom, and also the capital, surplus, and income of the federal land banks and the local loan associations, are exempt from federal, state, municipal, and local taxation. This exemption will make the farm-loan bonds especially attractive to investors and will assist in reducing considerably the interest rate charged the borrower.

In conclusion it may be stated that the benefits to be expected from the new system will be mainly the result of standardization as applied to the credit granted under the act and to the form of security placed on the market. The success of the new system will depend upon how satisfactory a standard for farm-mortgage credit is established and upon how well this standard is maintained by the land banks and the federal supervisory authorities.

THE FEDERAL FARM LOAN ACT—DISCUSSION

KINGMAN N. ROBINS:—Mr. Thompson's paper is the most acceptable exposition of the intent of the Federal Farm Loan Act that I have seen. It is to be regretted that so few public utterances on the subject of rural credits have been so free of misapprehension and misrepresentation of existing conditions in rural finance, or so appreciative of the real requirements of the situation.

There are many statements in Mr. Thompson's paper which I should like to emphasize—few that I should question. There are some considerations, however, that occur to me which I do not find suggested in his presentation of the subject.

Since time forbids more than a mere suggestion of these points, I have taken the liberty of analyzing the act with a view to stating categorically the underlying principles on which it is based. I have undertaken to classify these principles as "constructive" and "destructive" for lack of better terms. Such a classification must rest entirely on individual opinion, for the act is not yet operative, and consideration of it, therefore, must be theoretical. I take it, however, that there will be more or less general agreement or disagreement with the classification, depending on the social philosophy and economic beliefs of each man who judges it. Obviously there is not time here to argue economic or sociological theories—I can merely state the case and leave the argument to you.

I state the destructive factors first:

1. *The element of special privilege is fundamental to the act, in its provisions:* (a) For the exemption of the securities issued by the federal land banks from all taxation. By this provision the farmer's obligation is granted a differential of as much as 2 per cent per annum in such states as Ohio over the obligation of any other class in the community. The burden of taxation of which the farmer is thus relieved is obviously shifted to other classes of the population. (b) For the payment out of the public treasury of the small army of officials and employees provided for under the act. (c) For the use of an indefinite period of public funds without interest to capitalize the banks. (d) For the substitution of the credit of the United States government for farm credit in so far as the unthinking public is led to believe that bonds termed in the act "instrumentalities of the government of the United States" are actually the obligation of the government, and in so far as the United States government may feel called upon to make

good the obligation thus implied, in case of loss on the actual security.

2. *Economic law is violated by the provisions for:* (a) Restricting the loaning operations of the joint-stock banks in arbitrary geographical limits. This ignores a fundamental principle of investment selling, namely, that an agency manned by men of good reputation in their own community can command much greater confidence than an equally reliable agency in another community. The law, however, forbids the utilization of this principle in the organization of well managed joint-stock banks in the great money markets of the country to loan wherever there is demand for their funds. California can borrow only through local channels instead of directly from Chicago. (b) Fixing the maximum interest rate by statute. The law of supply and demand will control the rate in any event, and a fixed maximum may conceivably render the act inoperative in the communities most in need of increased facilities. The experience of the states with usury laws is evidence of this contention. (c) Joint guarantees, putting good, bad, and indifferent securities in the same category, penalizing the good for the advantage of the inferior.

5. The act recognizes, although, in our own judgment, it does not taxation from the former to other classes of the population; (b) the dilution of government credit; (c) the erection of a new bureaucratic system without civil service or other hindrance to political exploitation; (d) the inflationary tendency of the act with regard to land values,—a potent element in raising living costs.

4. *The act fails to serve its purpose in the following particulars among others:* (a) Restrictions on loaning are such that only about 52 per cent of the farmers of the United States can qualify as borrowers. (b) This 52 per cent constitutes that element of the farmers already best taken care of by existing agencies—no provision is made for farmers who have not already security for double the amount of the loan asked for. The landless man, the tenant, the farmer and the farmer's son with small savings, who want to establish themselves on the land, are not served by the new machinery. (c) There is no provision for the straight-term type of loan now most in vogue with farmers. The amortized loan is compulsory. Experience in the United States has not evidenced a demand among farmers for the amortized loan. They prefer a loan carrying privilege of prepayment in whole or in part, but without mandatory repayments, so that they can pay according to the season. Why should a farmer who is a business man, and who makes his borrowed money earn him more than

the interest he pays, want to be compelled to return his loan in dribblets, leaving his chief source of credit, his farm, encumbered meanwhile? Surely the farmer who makes such use of borrowed capital is to be encouraged and represents a type of farming ability far higher and more to be desired than the farmer who, to save his farm, must get out of debt because he cannot earn current interest on his investment, whether his investment be his own money or borrowed money. To argue that the system is necessary because farmers cannot make their land investment earn adequate interest is simply to demonstrate that the valuation of the land is too high. It will not help matters to install a system which provides for the continuance of such inflation. (d) There is no adequate provision in the act for extending interest and principal payments in seasons of failure, and for financing slow payments. It is a common experience of farm-mortgage bankers operating in the newer regions to advance to holders of mortgages in behalf of borrowers 50 to 75 per cent of interest as it falls due, and to carry these payments and principal items as well, sometimes for as much as two years, where they know that the default is due to misfortune and not to negligence or failure.

5. *The act attempts to create a governmental monopoly of farm-credit banking, on a foundation of special privilege.* (a) The provisions under which private enterprise can operate under the act are so discouraging and discriminatory in favor of the federal farm land banks that experienced farm-mortgage bankers generally agree that they cannot safely venture, especially as the law specifically forbids the joint conduct by the same management of a private mortgage banking business and a joint-stock land bank. (b) Owing to the element of special privilege supporting the federal farm-loan banks and joint-stock banks, their efficiency as economical and comprehensive rural-credit agencies can never be compared on a fair basis with private agencies. As Mr. George E. Putnam says in the December number of the *American Economic Review*, "This action [discrimination between federal land banks and joint-stock banks] was in virtual recognition of the superior efficiency of private enterprise when given an equal opportunity. It is inconceivable why the opportunity should have been withheld."

Turning to the pleasanter aspect of the subject we find the following constructive principles:

1. Farm land security is publicly recognized on a basis of its intrinsic worth.

2. Public supervision of farm-mortgage banks is provided, putting this form of banking on a plane with commercial banking.

3. Pressure is brought to bear on the states to enact proper title and collection laws.

4. Provision is made for a standardized form of security that may command public confidence and that may be approved by the market for its convenience and known stability.

5. The act recognizes, although, in our own judgment, it does not properly provide for, the right and advantage of coöperative credit arrangements among farmers.

6. Appraisal of land is to be based on the earning power of the land appraised. Adherence to this principle would do more than any other provision of the act to check inflation of land values, and would operate the more advantageously because of the other provisions of the act encouraging inflation.

JAMES B. MORMAN.—Mr. Thompson's paper gives a review of the main provisions of the Federal Farm Loan Act which was signed by the President and became effective on July 17, 1916. In discussing this paper I shall confine my remarks almost entirely to a few economic problems which are raised therein.

1. *Two kinds of land banks.* When it comes to a discussion of the intent of Congress in providing two systems of land banks, there is room for a wide difference of opinion. This act as it now stands was a compromise between two widely divergent bills passed by the Senate and by the House of Representatives. When these two bills went to conference, the conferees after a struggle finally agreed upon the act in its present form.

Congress as a whole had little to do with this measure except to vote upon it. The credit for the act is due to the influence of only a few men who were able to exert sufficient control over the Joint Committee on Rural Credits to have incorporated into the act certain well-known policies relating to farm-mortgage credit. While one insisted on having a coöperative system of borrowers, the other insisted on a capitalistic system of lenders. The former is expressed in the federal land banks which can do business in farm-mortgage loans with national farm-loan associations only; the latter is expressed in the joint-stock land banks which can make loans to individuals.

This law provides for a system of mortgage credit only. It is implied in the paper under discussion that the two kinds of land banks

deal with two classes of farmers on a different credit basis. Thus farmers who deal with joint-stock land banks are said to be able "to furnish adequate security for their loans," while those farmers who procure loans of the federal land banks through their national farm-loan associations are said to be "greatly in need of improvement in this respect." In other words, the two bases of mortgage credit here implied are adequate security and inadequate security for loans.

I know of no such difference in credit basis expressed or implied in the Federal Farm Loan Act. Loans made by the two kinds of mortgage banks are precisely the same so far as the security basis is concerned, namely, the appraised value of farm lands. Loans are to be made up to 50 per cent of the appraised value of the land offered as security for a loan, and the final and determining appraisement is that made by the same government appraiser who serves both kinds of bank operating in the same district. There is neither greater risk nor greater advantage with either kind of land bank. The security required is adequate to meet the demands of the investment market for safe credit instruments based on first mortgages on farm lands. No farmer can borrow of either kind of land bank who can not thus furnish adequate security for his loan.

2. *The proper granting of farm-mortgage credit.* The author of the paper under discussion maintains that "practically all the problems involved in the provisions of the present law arise either in safeguarding the proper granting of farm-mortgage credit or in providing the form of security needed to reach the investment market."

Among the problems thus raised are the economical administration of the national farm-loan associations, the duties pertaining to the offices of secretary-treasurer and loan committee, and the liability assumed in becoming a member of a national farm-loan association.

In discussing these problems it should be remembered that the Federal Farm Loan Act is an attempt to adapt European experience to American farm conditions. The mortgage and bond-selling features are derived from the German *Landschaften*, a system of coöperative farm-mortgage credit associations. But the restrictions on mortgage loans laid upon borrowers who are members of national farm-loan associations are not *Landschaften* at all. The same is true with reference to the organization and management of the local loan associations. They follow closely the *Raiffeisen* coöperative societies which make short-time loans to their members. But these loans are secured by notes with two or more endorsers and not by farm mortgages.

Now this combination of short-time with long-time principles may be especially adapted to American rural conditions in certain parts of the country and among certain classes of farmers. It may result in the development of a more pronounced coöperative spirit among farmers in this country—a result much to be desired for the economic welfare of rural communities.

At the same time it must be recognized that this is an experiment in rural credits which may or may not prove adaptable to American conditions. The comparatively large size of the average farm makes the organization and operation of a national farm-loan association in many parts of the country a problem not easy of solution. As pointed out by Mr. Thompson, the problems raised relate to financing associations, the territory they cover, the duties of the secretary-treasurer, and the supervision over the expenditure of loans. These problems can doubtless be met, however, if they are fully realized at the beginning.

Following the principles of Raiffeisen societies, the successful financing of farm-loan associations can best be accomplished by as much gratuitous service of members as possible. Neither the government nor the federal land banks will furnish the money to pay the running expenses of an association. Whatever expense has to be incurred must come out of the pockets of the members; so that, for the economical administration of a farm-loan association, it will be advisable for members to render whatever service they can without compensation. Mr. Thompson cites in illustration the service of the loan committee which "supplies without charge an appraisal of the lands offered as security," though the land allows the reasonable expenses of the loan committee to be paid out of the funds of the association.

The question of membership and the extent of territory within which an association will do business is another problem raised as a result of granting farm-mortgage credit. The large size of the average American farm, equaling 138 acres for the whole country, a knowledge of the character and solvency of members, and the supervision over the use of loans by borrowers should necessarily limit the extent of territory of an association in order to keep down expenses. Such limitation is in accordance with Raiffeisen principles. With a limited territory, a small membership, and largely gratuitous service, the share of the expenses of an association need not be much for each member to bear.

On the problem of the duties of the secretary-treasurer, Mr. Thompson says:

The secretary-treasurer of the association performs important services by transmitting approved applications and the necessary papers to the federal land bank, by handling all the funds, and by carrying on the necessary correspondence. He is also required by law to ascertain whether borrowers use the proceeds of their loans in the manner specified in their application blanks, and to report thereon to the federal land bank.

With all these duties and others required of the secretary-treasurer, the question of providing for his salary permitted by law will probably be one of the hardest to answer. The main expense of national farm-loan associations will doubtless be this officer's salary. The duties imposed upon him will require more time than he could in many cases afford to render without pay, unless the association is very small and confined to a very limited territory. Many of the duties attached to this office as provided by the Farm Loan Act are performed by the members of the Raiffeisen society without compensation, as an element in coöperative organization and for the mutual protection and financial benefit of members. The character and solvency of each person are well known before he is admitted to membership, supervision over the use of loans is done by the neighbors of a borrower, and the territory within which a Raiffeisen society operates is confined to very narrow limits. Moreover, many of these societies have a religious or philanthropic corp of officers who give their time and services freely; a member may offer to serve as secretary-treasurer without pay; and the use of a room in a member's house or place of business may be accepted at a merely nominal rental where the business of the society may be transacted. In short, the coöperative spirit of mutual aid and service is so pronounced that the duties of the secretary-treasurer and the expenses of a society are reduced to the minimum.

The author of the paper under discussion has called attention to these problems. They have not been raised for the purpose of knocking them down, but for the purpose of pointing a way out of the difficulties which the act itself raises. Many of these incidental features are not even hinted at in the provisions of the law. They are there and must be met sooner or later, because of the principles involved in the organization of national farm-loan associations and because they will involve expenses of administration.

As a matter of fact, the law requires of the secretary-treasurer even larger duties than those enumerated by Mr. Thompson. In addition to supervision over the expenditure of loans, this officer is required

"to ascertain and report to said bank the amount of any delinquent taxes on land mortgaged to said bank and the name of the delinquent."

Now note what these two requirements taken together demand in the way of service on the part of the secretary-treasurer. He must know the contents of each member's application for a loan, since it is required that each borrower state to what uses his loan is to be put. His application is sent to the federal land bank of the district and the bank keeps it. In order to become familiar with the objects named in the borrower's application, the secretary-treasurer should keep on hand duplicates of all applications for loans. In order to carry out the provisions of the law as to the supervision over the use of loans, he must visit every farm. He must also examine the tax books to find out if the borrower's taxes have been paid. The law requires the secretary-treasurer, therefore, to exercise constant surveillance over the farms and over the activities of borrowers. If a large area is covered by an association, these duties mean the spending of considerable time. If the secretary-treasurer has to be paid in proportion to the amount of time spent under these circumstances, his remuneration will constitute a problem of no small magnitude to the officers and members of a national farm-loan association.

Another problem which arises in connection with making mortgage loans by the federal land banks is that of the obligations assumed in becoming a member of a local association. The borrower has to subscribe for stock in the association to the amount of 5 per cent of his loan. This is an asset or investment. But in addition the borrower assumes a liability for the debts of the association to the amount of 5 per cent of his loan.

On this point I am inclined to take issue with the author of the paper, who maintains that the 5 per cent subscription for stock by the borrower "is not in the nature of an extra charge or bonus," since he says that "the stock serves as an investment paying such dividends as may be declared."

The law permits the borrower two ways of providing for this stock subscription. He may either pay cash for the stock at the time he procures a loan, or he may borrow from the federal land bank "the sum necessary to pay for shares of stock subscribed for by him in the national farm-loan association, such sum to be made a part of the face of the loan and paid off in amortization payments."

Now, if the borrower pays cash for his stock he loses the use of that much money up to the time his stock begins to pay him dividends,

however long or short that may be. If he has \$100 invested in stock, the use of that sum is reasonably worth \$6 a year at any ordinary business rate of interest. If no dividends are declared the first year, the rate on his loan is practically equivalent to a commission charge of \$6. If dividends are paid after the first year but do not equal the average rate of interest on business capital, his commission charge on his loan will be less than it was the first year, but it will be an amount represented by the difference between the amount of his dividends and the usual rate of interest for the use of business capital.

But if the borrower adopts the other alternative and borrows the stock subscription of the federal land bank, having it added to the face of his loan, he pays interest on this amount of money without having the use of it until his stock holdings begin to draw dividends. In either case, therefore, the requirement that a borrower shall purchase stock is from a strict economic point of view equivalent to a commission charge on loans.

This raises other questions, namely, that of the likelihood of a borrower getting dividends on his stock holdings in a local farm-loan association, and the amount he is likely to get.

The dividends on stock held by farmers in their associations must be derived from the profits of the federal land banks. But the land banks will be under heavy expenses at first as a result of their organization. There is little prospect of their paying dividends on stock for the first year and perhaps longer. This fact is well recognized by those familiar with banking experience. Unless associations are formed in large numbers in every district, and unless the farm-loan bonds sell with sufficient readiness to provide the money for making mortgage loans, there will be no profits to provide dividends.

It is anticipated, however, that the federal land banks will become profitable when carrying on a normal farm-mortgage business. If dividends are declared they will belong to the associations and not to the individual members of the association. These dividends must first be used to pay the expenses of the association. The more there is spent for expenses, the less there will be to divide among the farmers as stockholders.

But the law provides for building up a reserve fund out of the net earnings of national farm-loan associations. Finally, after expenses are paid and the amount has been set aside for the reserve fund, it is optional with the directors of an association whether dividends shall be paid to shareholders or not. The prospects of

borrowers getting dividends soon or of getting any sum from this source are more or less uncertain.

The writer of the paper also raises the question as to what constitutes a "farmer," so that he may borrow of a federal land bank. It has been practically decided that the farm owner who leases his farm to a tenant on a cash or share rental basis is an absentee landlord. As such he could not become a member of a local association and borrow of a federal land bank. He could, however, borrow of a joint-stock land bank and thereby reap the benefits of the Farm Loan Act in the form of reduced interest rates, long-time loans, and an easy method of repayment.

The farmer's need for additional capital is met by a provision of the act. Mr. Thompson's statement on this point is not so emphatic as it might be made. He says: "There is no reason why a borrower under the act may not ask for a reappraisal after the loan has run a few years, and renew or increase his loan."

The law says: "A reappraisal may be permitted *at any time* in the discretion of the federal land bank, and such additional loan may be granted as such reappraisal will warrant under the provisions of this paragraph." It is expected, therefore, that requests for reappraisals will be made and that increase of loans will be granted as borrowers increase the value of their security by the productive use of the capital previously borrowed.

In Mr. Thompson's opinion the success of the federal farm-loan system will depend on "the fitness and energy of the men who are placed at the head of each of the land banks." That this will be one of the most vital elements for their successful operation can not be doubted. But there is a still more fundamental factor of success than this, namely, the organization and successful management of national farm-loan associations. The federal land banks can only make loans through these associations and through agents. The latter must be some "duly incorporated bank, trust company, mortgage company, or savings institution, chartered by the state in which it has its principal office." But no agent can be appointed until the law has been in effect one year, and there are other reasons which make this provision inoperative.

For the success of the federal land banks, therefore, it is vitally important that numbers of farm-loan associations be organized in every land-bank district. At present Mr. Thompson limits the general activity in organizing these associations to the South and West. This

being the case, vast sections of our country are lacking in that initiative which is absolutely necessary to the success of the federal land banks in those districts. As the farmers become better acquainted with the prospective benefits which might come to them through this system by means of propaganda carried on by the Federal Farm Loan Board, the organization of farm-loan associations may be accelerated in those districts not now well represented.

3. *The benefits to be expected.* Now, what are the benefits to be expected from this act? In briefly alluding to this topic I quite agree with the writer of the paper that *borrowers* may expect farm-mortgage loans at materially reduced rates of interest, on long time ranging from five to forty years, on easy terms of repayment; a dependable source of obtaining credit, development of the coöperative spirit, encouragement to thrift, removal of the fear of foreclosure, and the raising of the status of tenants to that of land-owning farmers.

In its prospective benefit to tenant farmers, however, the risks of heavy indebtedness, of taxation, insurance, lack of working capital, and of other burdens which accompany land ownership should not be overlooked. So far as the operation of the farm-loan act is concerned, Mr. Thompson declares that "it may not be out of place to give warning against extravagant hopes for the elimination of farm tenancy. The existence of the tenant farmer in an agricultural economy rests on far deeper foundations than the one question as to what credit facilities are available."

The benefits to *investors* may be stated to be ready access to a standard form of security in convenient denominations and the encouragement of thrift among the rural population whereby their small savings may be ultimately invested in tax-free farm-loan bonds.

4. *Concluding remarks.* Now, let us look the land bank situation squarely in the face from a strictly economic point of view, as a result of Mr. Thompson's paper and this discussion.

For the granting of mortgage credit to farmers, the joint-stock land banks would seem to have decided advantages over the federal land banks. The latter are limited to twelve in number in the beginning; but any federal land bank may establish branches within its land bank district subject to the approval of the Federal Farm Loan Board. The establishment of branch federal land banks, however, would necessarily depend upon the growth in the number of national farm-loan associations within each district.

Joint-stock land banks, on the other hand, may be organized in every state; there is no limitation as to the number that may be organized if the farm-mortgage business warrants an increase in their number and if they offer the promise of profits to private capital by means of which they must be organized; and they can do business within the state in which each bank has its principal office and in one contiguous state. Joint-stock land banks, therefore, may cover the whole country in any number to meet the farm-loan needs of the different localities. This is a decided advantage over the federal land bank system.

From the standpoint of the borrower, the joint-stock land banks offer advantages superior to those of the federal land banks. Mr. Thompson points out that "the door to a joint-stock land bank is left wide open" to the individual farmer. He is not compelled to find nine or more other farmers to unite with him in order to get a loan; he is not compelled to subscribe for share capital in the bank making him a loan; he bears no responsibility in the expense of running the joint-stock land bank; and he assumes no 5 per cent liability in case of the bank becoming insolvent.

Thus the individual farmer can proceed to a joint-stock land bank, procure his loan on precisely the same terms as of a federal land bank, and have no questions asked as to how he is going to expend his loan. With a little more safeguard thrown around the use of loans made by joint-stock land banks, they could be made splendid institutions for encouraging a serviceable system of mortgage credit among farmers.

In like manner, if the federal land banks were so organized that they offered equal or superior opportunity to individual borrowers as compared with joint-stock land banks, the success of this government-supervised farm-mortgage system would be assured without the shadow of a doubt.

In the operation of the Federal Farm Loan Act, therefore, is presented a series of economic and social problems which are by no means difficult of solution. With these problems satisfactorily solved, the act is full of promise for correcting a wide range of farm-mortgage abuses and for bringing great benefits to farmers throughout the United States.

DO THE STATISTICS OF THE CONCENTRATION OF
WEALTH IN THE UNITED STATES MEAN WHAT
THEY ARE COMMONLY ASSUMED TO MEAN?

By ALLYN A. YOUNG
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As I begin, I can imagine the critic asking: "But precisely *what* are the statistics of the concentration of wealth in the United States commonly assumed to mean? And where are these statistics and what are they?" Now although the title of this paper is not of my own phrasing, I am willing, if needs be, to defend it. We are a long way, of course, from knowing at all accurately just how property and incomes are distributed among the twenty-one million or more families of this country. We do not even know whether the average family income is as low as \$1200 or as high as \$1600. We are not sure whether the share of the aggregate national income going to the richest 2 per cent of our families is more nearly a fourth, or a fifth, or a sixth of the total. The poorest half of our families may possibly get a fourth or perhaps three tenths of the national dividend—just what the proportion may be is uncertain.

The picture is blurred, but its general outlines are nevertheless unmistakable. We are reasonably certain that such full knowledge as we might gain from a complete and accurate census of incomes would merely give precision and definiteness to our impressions. There would be, we are confident, no general upsetting of the notions we have already formed with respect to the state of things. Yet, this being so, the wonder is that most of us seem to accept the situation with a large measure of complacency. If it is true that the richest 10 per cent of our families get a third, or anything like a third, of the national dividend, and that the poorest fourth get incomes of less than \$600, or at most less than \$700, per family, it might seem that we should not have to look further for an overwhelming indictment of our present economic system. Facts like these, some persons allege, must spell revolution.

Very likely we sometimes find it easy to push these troublesome statistics aside, saying to ourselves that viewing matters relatively, rather than absolutely, conditions are not so bad. Greater inequalities than these have existed in other times and other countries. Despite the relatively high average family income in the United States, incomes seem to be distributed here with rather less inequality than in some of the other great industrial nations.

In Europe one must go to the relatively poorer nations, somewhere back of the first rank in industrial advancement, to find incomes that we can say with any certainty are apportioned more evenly than incomes in the United States. But this is evading the issue. If our economic life is diseased, it is small comfort to know that the disease is world-spread. And are we ready to admit our willingness to submit the account of our own social and economic state for comparison on even terms with the reports from older countries? Has much of our talk about democracy, equality of opportunity, and "a fair field and no favor" been idle? Is it for nothing that men from the old countries have built up a new civilization here, leaving behind them, as they thought, most of the handicaps of inherited privilege, of class distinctions, and of a long accumulation of economic advantages, unevenly distributed? Or is there something to be pondered in Mr. H. G. Wells's observation: "Mr. Britling could explain away the faults of England readily enough. . . . But there in America was the old race, without Crown or Church or international embarrassment, and it was still falling short of splendid"?

If wealth were unmistakably more concentrated here than elsewhere in the world, we should, very likely, be more alarmed about the situation than we now seem to be. But there are other things beside downright obtuseness and an easy satisfaction with our standing relative to other nations that may affect our attitude. In particular, I suggest, the sharp edge of these facts is blunted by the following considerations: (1) The picture they give is that of a cross-section of a changing, shifting current, rather than of anything that might be interpreted as a definite and final outcome of forces now at work. (2) The meaning of inequality or concentration in the distribution of wealth and incomes is itself a matter of much uncertainty. (3) It is probable that complete and accurate statistics of the general sort that have already been used would still leave out of account some of the most pertinent facts. (4) Although we know that there is a high degree of inequality in the distribution of wealth, and although we know something of the general outlines of this distribution, the margin of uncertainty with respect to the facts is, nevertheless, so great that they have little compelling power. I shall discuss these points in order.

I

One does not have to shut one's eyes to the gravity of the immediately pressing problems growing out of the unequal distribu-

tion of wealth in order to maintain that things are not so radically wrong as they may seem to be. One may retain a large measure of confidence in the fundamental wholesomeness of a competitively-ordered society, and yet concede the concrete injustice of existing conditions.

During the last one hundred and fifty years the production of wealth has grown faster than the population. And new productive methods, new kinds of wealth, new forms of business organization, have followed, one upon another, in rapid succession. There are few varieties of income which can be expected to keep pace, year after year, with this process of restless change. [In a dynamic society more is produced than has to be imputed, in the form of earned income, to the efforts of the rank and file of the productive army. Economic progress yields what is, for the time being, a disposable surplus. The shares in this surplus are the principal stakes in the great game of business enterprise. Here are the roots of some of the most striking phenomena of the concentration of wealth, and here there are the widest disparities between service and rewards. There are prizes here for efficiency, for alertness, for foresightedness, and for luck and for unscrupulousness as well. Here are the chief sources of the gains of monopoly, of financial manipulations, and of strategic competitive advantages. Here are found most of those capitalized income-yielding opportunities which we know under such names as franchise values, corporate excess, and good will. The fruits of progress are not at first apportioned equally among all the coöperating producers, nor do they go, in major part, to the pioneers of science and industry who have made the largest effective contributions to the knowledge that makes progress possible. They go, rather, to those who actively and successfully contend for them.]

But there come, out of it all, increased demands for labor, for savings, and for productive agents of all kinds. Unless the supply of some productive agent is increasing with undue rapidity nothing can prevent it, as the volume of output grows, from commanding a higher price in the market. Monopoly may crumble and other business advantages may be snatched away by competition, but the forces working toward the diffusion of the product operate relentlessly and surely. Every bit of ground gained by the rank and file is tenaciously held, and becomes a starting point for yet further progress.

This impressionistic picture of an economic process must, for

present purposes, stand without the support of a detailed analysis. But it is, I believe, in essential harmony with the doctrines of most of the schools of economic theory. Its relation to the interpretation of statistics of the distribution of incomes and of property must be fairly apparent. Such statistics give a cross-section view of things; they speak for a given year or a given moment of time. But the operation of economic forces is not thus synchronized. The concentration of wealth that exists at any one time in a progressive society is in part an outcome of the fact that the productive army does not advance in even formation in its attacks upon the new sources of wealth. There is an advance guard and there are laggards and stragglers. No one knows just how far the concentration of wealth would be reduced, just how far the forces tending toward diffusion would operate effectively, if economic progress should cease, if our dynamic society should crystallize into a static state. But that distribution would be much evenner seems fairly certain. The concentration of wealth is in part one of the unwholesome fruits of progress. If concentration and diffusion are processes going on simultaneously, statistics show us merely the extent to which, at any one time, the forces making for concentration are ahead of the forces making for diffusion.

It may be objected that this is to no purpose, or at any rate beside the main point, that present inequalities in the distribution of wealth and the social problems growing out of them are none the less real. It is, of course, small comfort to those who are getting less than their fair share of the present product to know that they or their successors are likely to get more, particularly if along with this assurance there goes the probability that new inequalities are to be built up about as fast as the old ones are levelled down.

Now it is perfectly true that to impute these inequalities to one cause rather than to another does not lessen their gravity. But the right diagnosis of a disease does have an important bearing upon the choice of remedies. And so the right interpretation of the statistics of the concentration of wealth must strengthen the convictions of those of us who are opposed to anything like an arbitrary leveling down of fortunes or a revolutionary change in the general structure of our economic life. It must give us confidence that we are on the right road in our efforts to control monopoly, to restrict some of the abuses of corporation finance, to

do away with unfair privileges and advantages, to establish and enforce fairer standards of competition, to strengthen the bargaining power of the weaker, to reduce the extent to which accrued inequalities are transmitted from one generation to another by inheritance, and, by controlling immigration, to check the tendency of the process of diffusion to become a process of dilution. It may well be that this road is longer and has more turnings than we now imagine. But there is nothing in what we now know about the distribution of wealth to suggest that this road—the road toward equality of competitive opportunity—is not the right one.

II

I pass to a more technical question. What is the precise meaning of the concentration of wealth? By what standards shall we measure it? In general, I think, statisticians have been accustomed to use "concentration of wealth" and "inequality in the distribution of wealth" as loosely interchangeable terms. Now any departure from perfect equality in the distribution of wealth means *inequality*. But is *concentration* to be defined so broadly as this? Wealth might be distributed unequally, without there being any amassing or concentration of any relatively large part of it in the hands of any one group or portion of society. Concentration means, then, a particular kind of inequality in distribution. And moreover, while, statistically speaking, any perceptible degree of centralization must be deemed concentration, yet the social problem of the "concentration of wealth" is very certainly the problem of its undue or excessive concentration. But we have no definite standard of what constitutes justifiable, permissible, or normal concentration. And so the statistics are made to indicate merely the gross departure from a condition of absolute equality in distribution. One has to be on one's guard, therefore, against imputing to them a significance which possibly they may not have.

There ought to be agreement, it would seem, about what constitutes *equality* in the distribution of wealth. Pareto's interpretation of the meaning of his own well-known index of inequality in the distribution of incomes is based on the expressed assumption that when the number of persons with incomes of less than a given size increases relatively to the number of persons with higher incomes, the inequality of income distribution diminishes. I do not quarrel, as some have done, with this definition of relative equality and relative inequality in distribution. Given a definite income

range, with small incomes more numerous than large incomes, Pareto's hypothesis is, in general, consistent with the common notion of the meaning of equality in distribution. But, so far as I know, it has not been noticed even by his critics that Pareto, brilliant mathematician that he is, made a curious slip in interpreting the relation of his index to his definition of inequality. His index does not increase, as he supposed, with what he deemed inequality in the distribution of incomes, but decreases. It can be used, as Benini and Bresciani have used it, in this inverted fashion. At best, however, it is a poor index, being merely a rough measure of the evenness with which income receivers are distributed through the income range. It gives no simple and definite standard of comparison. The index becomes unity, for example, when the relative numbers of the persons receiving incomes of stated sizes are inversely proportional to the squares of their incomes. How far, in general, the notion of an even distribution of income receivers throughout an income range differs from the common notion of equality in income distribution may be inferred from the fact that, with an absolutely even distribution of income receivers over any income range, the richest fourth of the population would get seven sixteenths of the total income, while the poorest fourth would get but one sixteenth.

For the most part, however, equality of distribution is interpreted literally; that is, it is taken to mean absolute uniformity in the distribution of income. Thus, when a statistician throws his estimates into the familiar form that assigns a certain (large) proportion of the aggregate income to a certain (small) proportion of families, the comparison inevitably implied is with a state of things in which 50 per cent of the families get exactly 50 per cent of the aggregate income and 10 per cent of the families get 10 per cent of the income. And so with Dr. Lorenz's graphic device for representing the way in which such proportions depart from the line of absolutely equal distribution. So, too, with the index of concentration which Professor Corrado Gini has suggested as a substitute for Pareto's, but which increases when Pareto's decreases, and which becomes unity when one income receiver gets just as much income as another. So also with Gini's other index, which takes into account the sum of the differences between each income and every other income. This index, it is interesting to note, may be interpreted as a summary arithmetical expression of the degree of concentration denoted by the Lorenz

graph. So, finally, with all of those measures, such as the average deviation, probable error, and standard deviation, which indicate in a general way the extent to which incomes as a whole differ from the average income. The significant thing is that all of these ways of expressing the degree of inequality in the distribution of wealth use as a standard or reference of comparison an absolutely equal and uniform distribution.

Some or all of these measures are useful in comparing the distribution of wealth in different countries or at different periods. But none of them is of much help in forming a judgment with reference to the degree of undue or excessive concentration that may exist. The degree of departure from absolute equality, however measured or stated, must itself be referred, if not explicitly, then in some vague way, to a standard of normal or justifiable concentration. A dead level of uniformity is neither practicable nor desirable as an ideal of distributive justice.

A concrete example may give point to this consideration. Suppose that incomes in an imaginary society were distributed symmetrically around the modal or most common income, in the form of a normal frequency distribution. This might represent either one of two things: (1) a normal distribution of ability and a perfect proportioning of income to ability; (2) a random or chance distribution of incomes, under the influence of complex but unbiased forces. This second condition would be consistent with the existence of real equality of opportunity, broadly understood, coupled with the presence of a myriad of small circumstances that might deflect one towards a lower or a higher portion of the income range. Now suppose that the average family income is \$1500 and that half of the families get incomes that are within \$200 of this average. Under such conditions the richer half of the families would get 58 per cent of the aggregate income and the poorer half would get 42 per cent. Increase the dispersion of the distribution somewhat, so that half of the incomes are between \$1000 and \$2000. Then 70 per cent of the aggregate income would go to the richer half of the population, and 30 per cent to the poorer half. Increase the limits between which half of the incomes fall to \$800 and \$2200, and the portion of the aggregate income assigned to the richer half of the population becomes 78 per cent, leaving 22 per cent for the poorer half.

I do not think that Dr. King's recent estimates err in the direction of underestimating the present inequality in the distribution

of incomes in the United States. He assigns about 27 per cent of the aggregate income to the poorer half of the families and 73 per cent to the richer half. But this is a slightly smaller degree of concentration than would be given by a normal frequency distribution with half of the incomes falling between \$900 and \$2100. This suggests that no single or general statement of the degree of concentration can give, by itself, an adequate notion of the extent to which the existing distribution of wealth has to be deemed unsatisfactory. And instead of tabulating the statistics in the misleading form of the proportions of aggregate income or property in the hands of stated proportions of the population, it is better to use a simple frequency distribution, showing the relative numbers of income receivers or property owners in the different income or property classes. Such frequency distributions can be adequately described and compared, one with another, and with various ideal schemes of distribution by the use of the constants devised by Pearson for measuring their spread, skewness, and curvature. Such a handling of income statistics serves to focus attention upon the really important things, which are the upper and lower limits of the income scale and the manner in which income receivers are distributed between these limits. The *amount* of concentration, the amount of departure of a condition of uniform incomes, does not matter so much as does the particular *form* of the income distribution underlying the concentration. An identical general degree of concentration may result from a fairly good and a very bad distribution of incomes.

The worst thing in the present situation is undoubtedly the extreme skewness of the income frequency curve. The mode—the most common income magnitude—is very close to the lower limit of the distribution. Then the income curve descends rapidly as the higher incomes classes are brought under review, reaching a condition of relative attenuation at incomes of only a few thousand dollars, but stretching on for an absurdly great distance before the maximum incomes are reached. The problem of poverty and the problem of great fortunes are the problems of the lower and upper limits of this income curve. But, seen rightly, the problem of great fortunes is only part of the larger problem of the general skewness of the curve, the problem, that is, of the extremely small average differences in the incomes of persons in the lower part of the income range and the unduly rapid increase of these average differences as the view is shifted to successively higher income

groups. Put concretely, that 10 per cent of the families in the country get possibly three fifths or two thirds of the aggregate income ceases to appear principally as a problem of large fortunes, when it is realized that to include the richer 10 per cent of the families, one has to go down to somewhere between the \$1200 and \$1800 income levels. The most serious aspect of the distribution of property and incomes in this and other countries is not the presence of a larger or smaller degree of "concentration," but the general distortion of the whole income scheme, reflecting as it undoubtedly does the presence of a high degree of inequality in the distribution of opportunity.

III

I do not propose to discuss here the meaning and proper interpretation of all of the various available or possible sources of information respecting the distribution of property and incomes. Some of these matters, I understand, are to be dealt with by Dr. King in the paper which is to follow. Nor can I stop to attack the difficult general problems of the proper definition of wealth and of income for the purpose in hand. But I want to mention two points which seem to me to have an important bearing upon the degree of inequality in distribution reported by the statistics.

In the first place, what disposition shall be made in income statistics of the appreciation and depreciation of capital values? I do not refer here to such appreciation and depreciation as comes from improvements and betterments on the one hand and wear and tear on the other, but to the changing money value of unchanged things. These changing capital values, it is true, are in large measure a result of changes in the probable future income-yielding power of the things valued. But it does not follow that to count appreciation as income involves double counting. If savings are to be counted as income, and I believe that they must be, for the purposes of income statistics, appreciation in the money value of income-yielding goods or rights, being closely akin to savings in a number of important respects, must also be counted as income. It is no part of the annual product, as usually defined, but it is part of the annual *distribuendum*. It enters into the annual changes in the relative economic positions of the different members of society. Any one income receiver can convert his share, if he wishes, into money income and then into real income. It is impossible and, I think, not at all necessary to distinguish between

such appreciation as merely records the shrinkage in the purchasing power of the dollar and such appreciation as comes in other ways. So long as appreciation, of whatever sort, is distributed in other manner than in proportion to the other elements in current incomes, it has to be taken into account in income statistics, or at least in the interpretation of the significance of such statistics.

The census estimate of national wealth for 1912 exceeds the similar estimate for 1900 by about a hundred billion dollars. Some of this—I doubt that it is more than a third—represents an increase in the national inventory measured in terms of physical units, together with the increase in the unit value of short-lived equipment and products—the current assets of the nation. The balance of this increase consists very largely of net appreciation in the value of land and other durable forms of wealth. And there is an enormous amount in franchise values, monopoly rights, and good will and other vendible competitive advantages that does not enter into the statement. Altogether, it is likely that the recent average annual addition to the national *distribuendum* on account of net appreciation has amounted to as much as five and possibly as much as seven billion dollars, making a difference of perhaps 20 or 25 per cent in the national income statement.

One of the defects of British income statistics is that they do not cover gains from increases in capital values, even when these gains are realized in actual sales, except where speculation is carried on as a business. Now the effect of the inclusion of these items upon the apparent degree of inequality in the distribution of incomes will depend very largely upon whether they are counted as income only when realized by actual sale or set down yearly as accruals. Take the case of a farmer who bought a hundred-acre farm ten years ago. Since then it has been increasing in money value, as many farm lands have, at the rate of \$2 per acre per year. He now sells it with a gain of \$2000. If all of this profit is set down as income for this year, it lifts him, for the once, into the higher income groups and increases the general skewness of the distribution of income for the year. But if accruals had been counted at the rate of \$200 a year for ten years the increase would have been unlikely to have carried him up above the average income for the country. In fact, the skewness of income distribution might very possibly have been reduced. Moreover, if there were a million other farmers similarly conditioned, there

would be the choice between counting a million moderate gains or an average of perhaps a hundred thousand large gains annually. And so with those enormous increases in the values of business equities which have been a very important source of large fortunes, the method of accruals will increase the skewness of the income curve very much less than will the method of realized sales. For the purposes of income statistics there can be little doubt that the method of accruals should be preferred. To wait until the farmer's increased land values are realized in sales exaggerates the farmer's real position in the income scale in one year out of the ten and understates it the other nine years.

My other point relates to the statistics of the distribution of property. The most important facts that we have, and those most frequently quoted, have been gleaned from probate records. I confess that I have little confidence in the inferences that have been drawn from these figures. The principal difficulty is the difference between the age distribution of decedents and the age distribution of the living population. In England, for example, while the average age at death of that part of the population which lives to be at least twenty years old is over sixty years, the average age of living persons over twenty is about forty. Now as men grow older they often grow richer, and this fact has been shown by Mr. Bernard Mallett to have a very important bearing upon the proportion which the value of the estates annually passing from one generation to another makes of the aggregate capital value of the national wealth. For example, in the fiscal year 1913-14, the average value of the taxable estates left by persons dying in that year was £4150. But those dying at between twenty-five and thirty-five years of age left estates of an average value of only £1600. The average values of the estates which had been accumulated by persons dying between the ages of sixty-five and seventy-five was nearly £4200, while persons who lived to be more than seventy-five left estates with an average value of over £6000. In the United States, where fewer persons start with the initial advantage of inherited wealth, these differences are likely to be considerably greater. Now the danger is not that the probate records will give us an exaggerated idea of the aggregate money value of property holdings, for we have other and better sources of information on this point. But as used by Dr. Spahr and even as used by so careful and competent a student as Dr.

King, they give an impression of a higher degree of inequality in the distribution of property than really exists. Not only do many men grow richer as they grow older, but some men grow rich faster than others, while some men, especially among those with little property, grow poorer as they grow older. It follows that the inequality of possessions among persons at the end of life must be very much greater than among the living population. Statistics of the sizes of estates admitted to probate are nearly worthless unless they are accompanied by statistics of the ages of the decedents. And with the probate statistics thrown out of court, there remains virtually nothing that gives us any adequate notion of the distribution of accumulated wealth in the United States.

IV

Without knowledge of the way in which the ownership of property is distributed, with our income statistics largely guesswork, and their meaning and significance uncertain, we have naturally set the problem of the personal distribution of wealth in terms of the things we could see and be certain of: enormous fortunes at one extreme, a great mass of workers near the poverty line at the other. Right though we be in taking these things seriously, we should hardly be willing to rest content with a social program made up of anti-monopoly laws, inheritance taxation, and labor legislation, and a philosophy of economic reform compounded of philanthropy, of an avowed faith in industrial democracy, and of an attitude of jealous aggression toward great riches. As economists we are interested, or ought to be interested, in knowing whether the present economic scheme is bound to end in disaster; whether, with a little patching, it can be made to get along; or whether its essential principles need to be safeguarded and maintained by giving a new meaning and a new emphasis to real equality of competitive opportunity. In no other way could so much light be thrown upon this fundamental problem as by a thorough-going and authoritative study of the actual distribution of property and incomes. We lack satisfactory methods of analysis and interpretation, but most of all we lack the facts. General impressions will not suffice; in matters like this we are right in deferring judgment until we know, and know accurately. It is not a matter of the extremes of the income scale, but of the whole range. In statistics the undistributed middle is prone to be quite

as dangerous as in logic. For the study of actual present tendencies the analysis of middle-class incomes is fundamentally important. It is one thing to explain the causes of poverty or the causes of large fortunes. It is another thing to know just how sound our economic life is at its core.

The task is much too large for any individual scholar. The first step is to secure adequate sources of information. With income taxes just coming into importance as sources of federal and state revenues, is the time not ripe for the economists and statisticians of the country to make a statement as to precisely what information they want and why they want it?

DESIRABLE ADDITIONS TO STATISTICAL DATA ON WEALTH AND INCOME

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I.—THE GENERAL CHARACTERISTICS OF AVAILABLE STATISTICS

As soon as one essays the task of analyzing existing information concerning American wealth and income and their distribution, he is quickly faced by the fact that, in almost every instance, the data is strikingly incomplete. But this scantiness of desired figures does not come to pass because of any shortage in the effort which has been expended in the collection of statistics. My limited experience has convinced me that there is no subject under the sun concerning which facts have not been tabulated. Should you desire to know the number of grains of sand in the sea-bottom, the number of salmon caught in the Columbia, or the number of "suckers" caught by "blue-sky" corporations, the figures have been computed. If you are curious to ascertain how many days labor it took to build the pyramids, how many germs you consumed at this morning's breakfast, or how many times per page Shakespeare used the word "and," rest assured that the data are awaiting your examination. But, as a prominent advertisement used to read, "It is not so much to know the law as to know where to find it," and most of this marvelously varied collection of statistical information is buried far beyond the depths to which catalogues, dictionaries, or bibliographies give the slightest clues.

There is, then, rather a superabundance of statistical, or pseudo-statistical, information reposing in our libraries; but should we be interested in the problems connected with the wealth and income of the American people, we soon discover that the figures which we desire are not obtainable in any continuous or systematized form. And this may be said without in any way disparaging the able officials who have been in charge of the census and our statistical bureaus. The funds at their disposal are distinctly limited and they can only collect data concerning facts for which they believe the demand is most general. In order to assure continuity, which is such an essential feature if statistics are to prove of value, it is imperative to follow rather closely in the footsteps of one's predecessors, and, hence, the nature of the material gathered is largely determined by the forms outlined many years ago to meet the demands of that day.

Besides, the chief of the census bureau or the statistical office would need the gift of second sight to anticipate the thousand and one ideas which some one or another will attempt to elucidate or demonstrate by the help of the official figures. If a statistical problem of any intricacy is to be solved accurately it is nearly always imperative that the data must be gathered with this specific end in view. If, however, the government collects its figures for this particular purpose they are often too highly specialized to prove of any great utility in answering other questions. Is there any escape from this dilemma?

In so far as it is practicable, it appears that the solution of special problems should be left to private statisticians or organizations and that the government should continue to collect the raw material with which these private investigators begin their researches. But there are some specific problems which are too costly to be undertaken at individual expense and yet, at the same time, are of too great public importance to be left to private initiative. If light is to be thrown upon such questions it must be done principally through governmental assistance, and there appears to be no sufficient reason why this should not be forthcoming.

Our federal Bureau of the Census has properly devoted itself in most instances to the collection of information of a broad general nature. The other bureaus of the national and state governments sometimes have imitated the Bureau of the Census in this respect but sometimes they have gone to the other extreme and have engaged in the most highly detailed investigations in some limited field. This procedure is to be commended although it seems occasionally that some improvements might well be made in the selection of the special problems. Whenever it is deemed advisable to enter such narrow fields, it is desirable that the problems to be solved should be those in which large numbers of people are interested or those which vitally concern the national welfare.

The federal and state bureaus of labor present hundreds of volumes of figures concerning the wages of laborers, the extent of unemployment, and the prices of various articles, but should you attempt to find a continuous and comparative record in any governmental document showing whether the price per hour of labor is advancing faster for farm hands or for miners, for railway employees or for clerks in stores, you would seek in vain. Should you desire to know whether the price of house rents tends to keep

pace with the price of food, information would prove most scanty. Should you hope to ascertain whether union men or non-union men were more frequently unemployed, you would be disappointed.

A tremendous amount of effort has been expended in studying questions of merely local or temporary interest and very little headway has been made in coördinating these scattered endeavors, uniting the results, and presenting them to the public in a simple and intelligible form. For example, the United States Bureau of Labor collects data on wages in the manufacturing field; so does the Census; so do the labor bureaus of some of the states. At the same time, it is most difficult to find any continuous records of the wages of miners, farm hands, clerks, domestic servants and other very numerous and important classes of workers. In some instances, wages are given by the hour, in some by the day, in some by the week, and occasionally by the month or year; but only rarely are we informed as to the average number of hours worked in any of the longer periods, hence accurate comparison is manifestly impossible.

According to my perhaps archaic views, energy too frequently has been expended in trying to demonstrate perfectly obvious facts. We all know from common observation that many men receive such low wages that they cannot support their families in comfort. It is also perfectly evident that the poorer families spend their *entire* income for something—and these facts are apparently the leading ones that have been developed by many of the recent budgetary studies. The difficulty seems to be that many specialized inquiries are undertaken without first clearly defining the problem to be solved and, in every such case, the usefulness of the results is likely to approach zero.

It is probably too iridescent a dream to ever attain reality, but it would certainly be most helpful if the collection of all statistics of a given type might be centralized in some one bureau and published in standardized form from month to month and year to year. Before beginning operations, this bureau should devote very much time and energy to ascertaining exactly what problems scientific men believed most in need of elucidation and, having formulated these problems in the most exact fashion, it would then be the work of the statisticians to devise ways and means of solving these. It would seem that the talent of both the Associations here represented might very well be utilized in framing the new topics of investigation upon which they believe further knowledge

is most vital and in devising ways and means for attaining this end.

I shall take the liberty now of suggesting certain fields of inquiry which seem fertile and yet inadequately tilled at the present time.

II.—WEALTH AND ITS DISTRIBUTION

One query to which it seems that a more exact answer is generally desired is: How is wealth distributed among American families and how is this distribution changing?

The Massachusetts studies of estates throw most interesting light upon this question. Studies from probate records are necessarily limited in scope because they show wealth only at the termination of life and because the estates of the greater share of decedents are never probated. The latter is, of course, the much more serious defect. But neither of these objections seriously affects the usefulness of such data as a gauge of *changes* in distribution. A quarter of a century has elapsed, however, since the last period reported upon by the Massachusetts Bureau, and it would certainly seem worth while to have the series of comparisons so admirably begun brought down to date. Similar investigations in New York and a few sample states in other sections of the country would doubtless add most valuable information.

The tax rolls are the basis of existing census figures concerning the aggregate value of the wealth of the people of the United States. The attempt to adapt to this purpose the valuations set by assessors is always destined to meet with only partial success. Values for purposes of taxation are habitually underestimated. The plan of correcting this underestimation by dividing by some assumed ratio of assessed to true value will always be a crude method at best. In most communities, this ratio has never been worked out, and in but few places is it determined with even a reasonable approach to accuracy.

Another serious objection to using local tax reports as a basis of wealth estimation is that it is usually impossible to obtain therefrom any idea whatever of the distribution of property among families or individuals. Taxes are collected, not as a basis for statistical information, but in order to obtain funds, and, hence, the local or state authorities take little account of anything but totals. For these two reasons, therefore, it appears that any adequate statistics of existing wealth distribution must be obtained through the ordinary schedules of the decennial census. Errors from inquiries of this nature will doubtless be very numer-

ous but they will tend to be compensating. Many men, because of habitual secrecy and reticence concerning their business affairs will report their assets far below normal. Others, however, will exaggerate in order to magnify their own importance. As to which instances will occur more frequently, it is hard to say but, at any rate, there will be a noticeable tendency for errors to cancel out. The same facts would be true as regards reported liabilities, though the tendency in this case would presumably be stronger to under- than to over-estimation.

The first step in the census inquiry would be the drafting of the best possible question schedule. Much careful study would be needed before the final forms were ready for the printer. The following outline is suggested as a rough tentative classification of the various categories of wealth belonging to each individual:

I. Assets

A. Indirect Natural Resources

1. Land

- a. Farms
- b. Urban business sites
- c. Miscellaneous varieties

2. Mines

3. Miscellaneous

B. Transition or Capital Goods

- 1. Buildings
- 2. Machinery and equipment
- 3. Live stock
- 4. Raw materials
- 5. Dealers' stocks
- 6. Miscellaneous

C. Direct or Consumption Goods

- 1. Residence and park land
- 2. Houses, hotels, theatres, churches, etc.
- 3. Furniture, clothing, jewelry and miscellaneous

D. Claim Goods

- 1. Notes, mortgages, bonds, etc.
- 2. Stocks
- 3. Insurance policies—cash surrender value
- 4. Miscellaneous

II. Liabilities

- A. Current accounts
- B. Short-term notes
- C. Bonds and notes secured by mortgage
- D. Miscellaneous

Our inhabitants are already required to give much of this information so that the new questions to be added to the schedule

would not be numerous. If it is feasible to learn the value of farm land, factories, etc., it likewise seems probable that similar knowledge can be gathered concerning holdings of stocks, bonds, and other securities.

Once the data was collected, the next problem would be its classification on a logical basis. To determine what is logical we must first decide upon the questions which it is most imperative to answer. As previously stated, such a decision as this would seem to be a legitimate function of such organizations as the American Statistical and Economic Associations and should, of course, be arrived at only after most mature consideration. As topics at least worthy of mention, I would suggest studies of the relationship between the net assets of the family and (1) the size of family, (2) the age of head of family, (3) race, (4) nationality.

It may be well to devote a few words to the reasons for each of these classifications.

The first would throw light upon such questions as the following: (1) Does great wealth mean larger or smaller families? (2) Does a large family necessarily lead to poverty? (3) How does wealth in general tend to vary with the size of the family?

The second classification would help in answering this query: Do we have a normal tendency in the United States for a man to accumulate property as he grows older? If so, at what rate? Do all classes of the population participate in this tendency?

The third classification would be necessary in order to separate out the white race so as to obtain a fair basis for answering the questions just propounded. It would also be of interest in enabling us to compare the Caucasian and Negro races and, if the inquiry were continued decade after decade, the relative economic progress of whites and blacks might thus be measured with a reasonable degree of accuracy.

The fourth classification on the basis of nationality is one which might be elaborated indefinitely, if funds were adequate, or, on the contrary, it might be confined merely to the comparison of property holdings of those persons who were native born of native fathers, who were native born of foreign fathers, and who were foreign born. This simpler analysis would probably answer the requirements of most investigators and would immensely reduce the extent of tabulation necessary.

Many other classifications and lines of inquiry would doubtless suggest themselves to nearly every economist and the above are offered only as being among those which would perhaps have the widest appeal.

III.—THE AGGREGATE NATIONAL INCOME AND ITS DISTRIBUTION

A study of wealth distribution is interesting because it deals with the rights of control. Property necessarily means economic power and is ordinarily the key to other kinds of power as well. A man's control over his own time, over his own freedom of movement from place to place, over the activities of other men, over the uses to which goods shall be put, in short, over the whole modern system of production varies directly and almost proportionally with the value of the property rights which he possesses. To the ambitious man who believes that leadership is the only worthy goal or to that political scientist who considers governmental control the chief end of human progress, a study of property distribution seems most vital. On the contrary, to those who think more of immediate economic welfare, who are interested in the comforts and conveniences of every-day life, the question of wealth or property may seem of little import. Such persons will naturally turn their attention to the various types of income rather than to wealth.

The kind of income with which people are most vitally concerned is, of course, real or psychic income. Thus far, however, this particular species has successfully defied all attempts at accurate statistical measurement. Apparently, the commensurable phenomenon which most nearly resembles psychic income in the nature of its variations is income in purchasing power, and this is merely a calculation of what book or money income would be if the price level never varied. Since, in reality, the price level is always fluctuating, we can only measure income in purchasing power by computing an average index of the prices of things which some designated class of persons actually purchases and then compare the average relative price changes in these commodities with the average relative changes in the book or money incomes of the persons composing the class in question. In short, we attempt to measure the supply of economic goods available for a given person or class by means of the roundabout device of introducing commensurable money values into both terms of a ratio with the knowledge that the monetary factor will cancel itself and disappear.

If, therefore, we desire to add anything worth while to our existing knowledge concerning income distribution or changes, we can only hope to succeed by improving our data concerning book or money incomes and various kinds of indices of prices.

In the United States, the only available source of information concerning income distribution among the wealthier classes is contained in the reports on the income tax. This is necessarily faulty because of the natural tendency to evade the burden of taxation. The federal law exempts incomes to such an extent as to make it throw light only on the receipts of the relatively wealthy. The Wisconsin law varies the exemption with the size of the family thus making it very difficult to utilize the data. By going back to the original records, Professor Henry M. Trumbower, now a member of the Wisconsin Railroad Commission, was able to regroup the cards in such a way as to show the reported incomes including exemptions. However, since married men with incomes of \$1200 or under are not required by the Wisconsin law to file schedules, and since these comprise the majority of heads of families, it is manifestly impossible to arrive at any complete classification. It is not an entirely safe assumption anyway to suppose that Wisconsin fairly represents the other forty-seven states of the Union in income distribution, even though we know that it is an average state in many respects.

If we now turn to the problem of estimating income distribution among the poorer classes, we find here, likewise, but few accurate indicators. The investigations of the United States Bureau of Labor in 1903, the study by the British Board of Trade in 1908, the wage distribution recorded by the Census of Manufactures in 1905, and numerous but scattered inquiries in narrow fields throw much light upon the subject, but the statistician is nevertheless compelled to make many rather sweeping assumptions on rather slender bases before he can piece together a curve or table picturing income distribution among working class families.

Still further assumptions and generalizations are necessary before the curve for the working class can be coupled onto that for the well-to-do and rich, thus completing the money income distribution curve for the United States as a whole.

The problem of estimating total income for the people of the nation is relatively more simple but cannot be accomplished with any high degree of accuracy by use of the existing data. Three separate lines of attack are available: first, the estimation of total consumption; second, the summing of incomes of all individuals; and third, the calculation of the total annual product. Were these three quantities all computed with accuracy, it is evident that the last two would be identical and that the first would be

larger or smaller than the others according to whether the inventory of accumulated goods on hand was diminished or increased during the period considered.

To estimate total consumption, it is necessary to differentiate between goods used directly and goods used indirectly. It is necessary to evaluate the services of durable consumption goods and the direct services of persons. This includes such nice problems as estimating the value of poultry, vegetables, fruit, etc., consumed on farms; the aggregate rental value of residences, and the amount spent for entertainment. Such estimates generally consist in little more than assuming as the correct figure the mid-point between possible limits of error.

Total book income for the nation can be estimated with a higher degree of accuracy than can total consumption. The former may be approximated by adding together estimated individual book incomes. Data concerning average wages in different occupations is quite abundant and the census gives us a fair idea of the average number of persons following each calling. But even this process is not free from difficulties. Laboring families obtain much of their income from property owned, by renting rooms, by keeping boarders, etc. About the only study throwing enough light to be worth mentioning upon these supplementary income sources is the Eighteenth Annual Report of the Bureau of Labor, and this is thirteen years old. It is possible that conditions have changed noticeably during this interval. Add to this difficulty the presumable underestimation of incomes in the federal and state tax lists of the wealthier classes and also the lack of information concerning the vast numbers of persons such as farmers and small merchants who are not employees and are still too poor to pay an income tax, and the apparent simplicity of the problem becomes less evident.

The last recourse, then, in attempting to ascertain total national income is to turn to data on production. It is possible to find recorded values for most of the raw material and to trace the various value additions successfully until the finished product finally emerges. But even this route is by no means all smooth sailing. We know the value added by manufacture and by transportation, but what about the value added by the great mercantile class? True, data is gradually accumulating concerning the fraction of the final selling price going to remunerate this function of adding time utility to goods but it is still complete in only a few

lines. Likewise, the value of product contributed by personal servants, by the use of residences, churches, theatres, public buildings, etc., is nowhere accurately recorded. Yet, with all its defects, this is by far the easiest path to follow.

Would it not, however, be advisable for the Census Bureau to make direct inquiries concerning individual, family, and corporate income? Would it not be advisable to classify this income rather carefully as to source using a classification somewhat like the following?

NET BOOK INCOME CLASSIFIED AS TO SOURCE

1. Rent of land
 - a. Farm land
 - b. Mines
 - c. Urban land
 - d. Miscellaneous natural resources
2. Rent of transition or capital goods
 - a. Business buildings and equipment
 - b. Residences
 - c. Miscellaneous
3. Income from securities
 - a. Shares in partnerships or corporations
 - b. Notes, bonds, etc.
4. Income from wages or salaries
5. Net entrepreneurial profits
6. Miscellaneous income

It would be highly desirable, also, if we could learn something about the annual savings or deficit in the family finance, but it seems improbable that this difficult task could safely be added to the already heavy and intricate burdens of the census enumerator. Some will doubtless affirm that any inquiries concerning income are too inquisitorial to be entrusted to these functionaries with any hope of getting accurate results. The strength of this position is lessened by the fact that the class of people most reticent about their financial affairs have become accustomed to the inquiries connected with the income tax, and inquiries to which people are accustomed are much less likely to arouse their antagonism than are those of an unusual nature. There naturally would be numerous large errors but, as in the case of the study of wealth, these would probably tend to offset each other, since some would report too large and others too small a net income. The analysis of income made by the government for purposes of collecting the income tax would doubtless prove extremely valuable to those devising questions for a census schedule. While it might be neces-

sary to make considerable modifications and alterations, the difficulties and mooted points have, at least, been clearly brought to light.

The income receivers would naturally be divided into individuals, partnerships, and corporations. The individuals ought probably to be reclassified on lines identical with those used for wealth. This plan would have the merit of facilitating comparisons of wealth and income.

IV.—CHRONOLOGICAL CHANGES IN INCOME

So much for the desired data on income which the census might well attempt to gather in order to clarify the problems of distribution. After such an investigation, we could hope to answer more definitely questions not only concerning distribution among families but also among the factors of production. These elaborate decennial studies are highly desirable in order, first, to give us a well-established base of operation and, later, to serve as guide posts to prevent us from wandering into paths of error. But, in nearly every field of economic activity, noteworthy fluctuations take place between the census years. These fluctuations are largely cyclical in their nature and are of such great importance that the government can ill afford to ignore them to the degree which has been done in the past. To study these cyclical movements, we need not decennial, but rather monthly or at most quarterly, reports. Evidently, this type of study must be carried on by enumerators who are always in the field. For such studies, complete data are not only forbidden by prohibitive expense but are absolutely unnecessary and useless. What is essential, is a collection of samples properly distributed both geographically and industrially.

The sampling for this purpose should be done on the theory of considering each citizen equally important. This means that samples should be collected from each state in proportion to the population; that the urban and rural districts should furnish samples in proportion to the inhabitants residing in each; and that the samples from each industry should be numerous in proportion to the number of workers which the industry employs. Were it not found feasible to apportion the samples in this fashion, the same results might be mathematically obtained by giving to each variety of samples the weights necessary to place all averages upon the basis of numbers of persons.

Stress is here laid upon the apportionment of samples or weights because the continuous statistical studies of the past have been given to overweighting certain classes. It is said that, in the last political campaign, the vision of certain politicians failed to reach beyond the Mississippi. Likewise, the visions of our governmental statisticians have too frequently failed to pass outside the city limits or even outside of certain factory districts. Continuous data concerning wages and hours of labor are confined largely to manufacturing industries and the unionized trades. Unemployment statistics are usually reported for trade unions only. The statistics for the mines, the railways, and the rural districts are woefully inadequate and are almost incomparable with the results set forth by the federal Bureau of Labor Statistics. There is no intent here to reflect upon the competence of the people in charge of the respective fields of inquiry. They doubtless utilize their time and funds to as good advantage as circumstances permit. The present head of the United States Bureau of Labor Statistics deserves the highest commendation for the immense progress made toward putting the work upon a scientific basis, especially as regards the indices of wholesale prices. The criticism is on the lack of organization which permits different bureaus to gather statistics of similar nature and which allows purely technical positions such as those held by chiefs of statistical bureaus to be classified among the political spoils, with the consequent likelihood of quadrennial changes in personnel.

But it is neither necessary nor desirable to discuss further at this time existing statistics. The fruitful thing is to ascertain what new data are really essential for measuring changes in income. Innumerable varieties are desirable—which are of greatest importance? Those that seem to me fundamental are as follows:

- I. A General Weighted Price Index to Measure Changes in the Value of Money with Sub-Index Numbers as follows:
 - A. Wholesale commodities
 - B. Stocks and bonds
 - C. Real estate—urban and rural
 - D. Rents—urban and rural
 - E. Labor per hour—classified by industries and occupations
 - F. Retail prices

The data for this general index number should be weighted as nearly as possible in accordance with the volume of transactions in each field, in accordance with the principles laid down by Professor Irving Fisher.

II. The Hours of Labor per Week

For this purpose, all employees should be divided among the same industrial and occupational classes used for ascertaining the price of labor for the general price index described above. With information available concerning the price of labor per hour and the hours worked per week, we are prepared to tell something concerning the fluctuations in the laborers income.

III. A Consumer's Index of Prices, Subdivided According to the Following Classes of Consumers:

- A. Rich
- B. Upper middle class
- C. Lower middle class
- D. Poor

The consumers' index should evidently have each article weighted in proportion to the amount thereof consumed by the given class. We have long possessed a satisfactory food index number. Beginnings are being made by the United States Bureau of Labor in recording the prices for dry goods and fuel. But dry goods are not the only kind of clothing, and price changes in so narrow a field may be far from typical. A large share of the ordinary consumer's budget fails to appear in any governmental price records. So far as the federal retail price indices are concerned, we do not live in houses, wear coats or shoes or hats, use electric lights, go to the theatres or movies, ride on the street cars or railway trains, read newspapers, or pay doctor bills. In brief, there is no index number in existence which enables us to tell with any reasonable degree of accuracy whether either wages or income in purchasing power are going up or down. The institution of such an average index number seems to me to be the most vital addition to our continuous statistics needed at the present time.

These figures should not only be gathered for the present but should, so far as feasible, be carried back into the past. The obstacles to obtaining standard articles to represent each type of expenditures is great but they may be overemphasized. With patience and sufficient appropriations, it seems entirely practicable to present a consumers' index extending back for at least a couple of decades which would be accurate enough for all intents and purposes. After all, most people are not interested in minutiae and a statistician is, in no sense, in duty bound to present only figures which are accurate to a high degree. The accountant must make his accounts balance to a cent. The statistician needs only to be sure that his figures are accurate enough to answer *truthfully* those questions which they purport to answer at all.

IV. Unemployment, Subdivided under the Same Industries and Occupations Used for Wages

This fourth principal record is absolutely essential before we can judge changes in the income conditions of the working classes. It has hitherto been deemed impracticable to collect unemployment data from the workers themselves. This idea seems largely fallacious. In no other manner, can we ever hope to learn very much concerning lack of work among the unskilled and casual workers—the classes who probably suffer most severely from this evil. No employer and no trade union secretary can tell us how many weeks these men were out of work during a given month or year.

To determine variations in the income of any part of the wage-earning class we must then know four things: (1) the wage rate per hour; (2) the hours of labor per week; (3) the number of weeks employed per year; (4) the relative prices of the commodities purchased.

With these four records complete we can picture, with a fair degree of accuracy, the changes in working-class income. The fact is fully recognized that there is much income from other sources but the wage furnishes the only part in which there is marked variation.

It is, moreover, absolutely essential in any study of distribution and price changes to keep separate the above four ideas. To confuse the price of labor, which corresponds fairly closely to the hourly wage, with the daily, weekly, monthly, or annual earnings, all of which are essentially income concepts, is to sound the death knell of all accurate thinking in this field.

My knowledge of the methods used and difficulties involved in collecting this type of data is so meager as compared to that of many members of the American Statistical Association that I hesitate even to make a suggestion along this line, but I have often thought that it might be feasible to collect all of this information by aid of postmen. The city and rural mail-carriers penetrate into nearly every community of the country. They know the people; they could easily ascertain the facts concerning prices, wages, hours of labor, and unemployment; they are men of intelligence; they all report to a central authority; why are they not the logical men to gather the needed data? Of course, they should have some slight extra recompense to pay for performing this new task, but the expense involved should be comparatively trivial.

V.—SUMMARY

The ideas which I have attempted to set forth here might be summed up as follows:

1. We need an enumeration of the most important problems to be solved.

2. The facts necessary to solve these problems should be accurately determined upon.

It would be the legitimate function of a joint committee of the American Statistical and Economic Associations to outline both of the above fields in detail.

3. The present duplication of work in these fields by different state and federal bureaus should be eliminated, all statistical work of this nature being placed under the direction of one central authority.

4. This central bureau should so systematize the work as to give unity and continuity to the entire field. The principal averages of wages, prices, etc., should be presented monthly with a promptness and regularity approaching that which characterizes the appearance of the reports of the Weather Bureau or the index numbers published by financial magazines.

We are fond of boasting of American efficiency and here seems to be an opportunity of demonstrating our claims in this line by putting into operation some such program as the one just outlined. If successfully executed, this would certainly set far to the front a new standard in the field of wealth and income statistics.

THE STATISTICS OF THE CONCENTRATION OF WEALTH —DISCUSSION

DAVIS R. DEWEY.—The subject of the amount of national wealth is an alluring field into which doubtless many of us have at one time or another made a visit. To me, however, it has proved a land of mystery; and yet, why should it? The data which have been collected for the United States in regard to the amount of wealth and its character appear very definite. We are told, for example, that in 1912 there was \$188,000,000,000; and we can figure out the amount per capita and the amount per family. We know what this wealth includes; as, for example, real estate including buildings and improvements, not only of private individuals but also of the government. It includes live stock, farm implements and machinery, manufacturing machinery, tools, and implements, coin, railroads and their equipment, street railways, telegraph and telephone systems, the products of agriculture, manufacturing, and mining, furniture, carriages, etc. All these items are denoted in the census bulletins with specific amounts. Is this total figure, however, which is given by the census, a reasonable one? It is difficult to comprehend the significance of \$188,000,000,000. If there be a multi-millionaire in the country with a wealth of a billion dollars, it means the total wealth of the nation is 188 times as much. A billion is approximately the wealth returned for the state of Maine, or for Vermont and New Hampshire together. I am not willing to believe that the wealth of the nation is not far greater than the wealth of any one individual as measured by 188 to 1. In other words, when we speak of the wealth of a millionaire, we are valuing it by a yardstick or economic measure which differs from that by which we are measuring the total wealth of the United States.

For what purposes do we desire these statistics of wealth? There are two: in order to throw light upon the distribution of wealth, as to compare the total amount of wealth in the country with the wealth of an individual or group of individuals; and, secondly, to measure the increase of wealth.

On the first point, then, it seems to me that the statistics which we have at hand throw very little light.

In regard to the increase of wealth, according to the estimate of the census, the total was \$89,000,000,000 in 1900 and \$188,000,000,000 in 1912. This means that the wealth more than doubled in the twelve years between 1900 and 1912. Notwithstanding these figures, I am

again slow to believe that the amount of wealth, in any sense which has social significance, increased in such amount. The explanation for the figures probably lies in the inflated values in 1912 as compared with 1900. Moreover, in all estimates of national wealth there is danger of omitting from the estimate socialized wealth. Wealth which is transferred from individual ownership and which becomes a common possession is likely to shrink in terms of monetary value. For these reasons it seems to me that the figures thus far published do not contribute very much to the solution of economic problems as they present themselves to students at the present time.

GEORGE E. ROBERTS.—I have no criticism to make of the papers which have been presented, but before the discussion closes I should like to see a little more emphasis given to one phase of the subject. The question is whether the available figures for the distribution of wealth really mean what they appear to. The figures commonly used purport to show the ownership of wealth, and they relate almost entirely to the ownership of productive property, and they certainly do not give a true showing of the distribution of the necessities and comforts of every-day life.

Professor King has divided wealth into four classes, but for the point I am making I would divide it into two classes. There is the class composed of things which minister directly to our wants and welfare, such as food, clothing, houses, schools, hospitals, etc., and there is the class which is the class composed of productive property, which is useful only as it produces the goods and services of the first class. It is in the ownership of property of this second class that the inequality of wealth as shown by statistics exists. But these statistics are not as significant as they are usually represented to be, because the benefits of productive property are not restricted to the owners. On the contrary, they are shared by every person in the community. The benefits of the development of the steam engine are not confined to the owners of steam engines; the benefits of railways are not confined to the owners of railway shares. We have seen in the last few years a vast expenditure of money for the improvement of railway terminals about New York, and the benefits of these improvements will go to all the residents of the country, not simply to the owners of the railways or the residents of New York, but to the people of the whole country. It has been recently demonstrated that important economies can be effected by the use of electricity for motive power on the railways, and it is desirable, not only from the standpoint of the railways but from

the standpoint of the public that capital shall be so invested. Improvements of this kind are a part of the industrial equipment of the country, no matter who owns them, and yield benefits to the public that are vastly more important than the benefits to the owners.

If we reflect we shall see that practically all of the great expenditures for new construction and equipment which are going on about us are for the purpose of providing for the wants of the public. These improvements mean that the production of goods is constantly increasing very much faster than population, and the only way these goods can be distributed is by such a continual readjustment of wages and prices as will enable the masses of the people to buy them.

In short, the distribution of wealth which is shown by the statistics of ownership is not a true and final distribution. A great many people who have very good incomes spend them as they go along and do not figure in ownership at all. On the other hand a man who puts the major portion of his income back into productive property increases the supply of goods for distribution, reduces the prices for all consumers, and shares the benefits of his wealth with the public. Real distribution must be measured at the point of consumption.

ROBERT L. HALE.—If I understand Mr. Roberts' point correctly, it is that the manner in which wealth is distributed is of no great moment, inasmuch as there is a natural limit to the amount which anyone, however rich, can consume, and as the balance above what any man consumes is put back into industry and thus benefits the public as much as if they owned it. If this point is sound, it seems to me that a great deal of energy is being wasted in attempts to prevent theft and political graft. Why worry if the Tammany grafter or even the ordinary thief gets hold of something to which he is not entitled? He will only consume part of it and with the rest he may build a cotton warehouse.

Yet we do worry—Mr. Roberts, I presume, with the rest of us. Why? Why do those of us who differ with Mr. Roberts worry over the unequal distribution of wealth? Because in the first place it does divert a great deal of the wealth which is being produced into channels where it serves to gratify the superfluous wants of the rich rather than the more pressing wants of the poor. Because, in the second place, a great deal of it comes as a consequence of the owner deliberately limiting the amount of his output, thus diminishing the total production of wealth. Because, in the third place, the failure

of the government to take back, as change, that part of the large incomes granted by it (through the law of property) which does not act as an incentive to production, makes it necessary to impose taxes which do trench on the necessary incentive and which thus, by lessening production, increase the cost of living. Because, lastly, the choice of the channels into which industry should be made to flow ought not to be left to the whims of a comparatively few rich men to whom the government seems at present to have delegated the power so to choose.

Precisely what forms of income could be more equally distributed without checking the incentive to produce is another question. It is one which Mr. Roberts does not attempt to answer, since from his point of view it is irrelevant. But equally irrelevant, from his point of view, must be any dispute as to the title to any property.

THE SITUATION OF THE UNITED STATES AT THE CLOSE OF THE EUROPEAN WAR—WITH SPECIAL REFERENCE TO THE GOLD SUPPLY

By GEORGE E. ROBERTS
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The war and the derangement of industry and world trade incidental thereto have caused an international shift of gold of immense proportions, besides which they have brought into sight and into monetary use a large amount of gold heretofore hoarded and idle, and occasioned very large issues of paper money in the warring countries. The effect is to increase enormously the world's supply of money, and as these developments are still going on, and likely to continue for some time, the question of what effect this increase will have upon the level of prices and the general state of credit, industry, and business becomes an exceedingly interesting and important one.

Since the beginning of the war the United States has made a net gain of gold, according to Treasury estimates, of nearly \$1,000,000,000, or over 50 per cent; the state banks of six neutral countries of Europe, viz., Norway, Sweden, Denmark, Holland, Switzerland, and Spain, have gained \$390,000,000, or about 107 per cent. Argentine has gained about \$100,000,000. In all, the neutral countries have added approximately \$1,500,000,000 to their gold stocks. Japan, which, although a belligerent is commercially rather in the position of a neutral, has added \$42,000,000 to the reserves of her national bank. While these gains were being made elsewhere, the belligerent countries of Europe have not, on the whole, lost gold. The Reichsbank of Germany has increased its holdings since the war began from about \$323,000,000 to about \$600,000,000. The larger part of this gain is understood to have come from gold coin, ornaments, plate, etc., turned into the bank by the people of Germany in exchange for the bank notes, but a portion of it may have come from the Bank of Austria-Hungary, which at the outbreak of the war held about \$250,000,000 and has published no report since. The Bank of England holds on its own account about \$75,000,000 more than at the beginning of the war and also holds about \$142,000,000 as a redemption fund against the exchequer notes. The Bank of France held in its own vaults about \$65,000,000 less than at the outbreak

of the war, but shows in its statement gold holdings or credits abroad amounting to about \$275,000,000. The latter probably represents its contributions to the allied pool. The Bank of Russia also shows large gold credits abroad, and although for a time it showed more gold in vault than at the beginning of the war, it now shows about \$25,000,000 less than at that time. The Bank of Italy has lost about \$30,000,000. All together, not counting the French and Russian credits in other countries, the five belligerent countries named have about \$375,000,000 more in their banking and currency reserves than when the war began. This takes no account of gold in the allied pool, if, as understood, these funds do not appear in the statements of the Bank of England. Before the war the National Bank of Belgium held approximately \$60,000,000, which presumably has been added to the reserves of the Bank of England or the Bank of France. The total net increase in available gold, in all countries, according to these figures, is about \$1,870,000,000. The world's production of gold from the mines has been about \$1,000,000,000 in two years, and the consumption of new gold, although presumably much less than usual, must have been at least from \$75,000,000 to \$100,000,000 per year. If these figures are accepted, the amount of gold gathered into the great central banks from other banks and from circulation, from private hoards, and recovered from use in the arts, would aggregate approximately \$1,000,000,000. Knowing what has been done in Germany and France, this is an entirely reasonable estimate.

It is not likely that the countries at war, excepting Japan, will be able to add to their gold stocks during the war. The new production, running at \$500,000,000 per year, will go to the neutral countries, and the present holdings of Great Britain, France, Italy, and Russia, probably will be depleted by payments to the neutral countries. Norway, Sweden, and Denmark have now raised obstacles to the importation of gold, and the Bank of the Netherlands is discouraging further importations. It looks as though the United States would have to take the bulk of the world's production and of the stores released by Europe.

The increase in paper money outstanding in the countries under review has been as follows:

Great Britain	\$710,000,000
France	2,223,000,000
Germany	1,334,910,000
Austria-Hungary	no report
Italy	358,290,000
Russia	2,976,495,000
Norway	29,715,000
Sweden	44,425,000
Denmark	31,000,000
Holland	162,865,000
Switzerland	39,095,000
Spain	78,860,000
Japan	42,450,000
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	\$8,031,105,000

Action of Scandinavian Countries

To an important extent the issues of paper money represent bank notes given in exchange for gold, so that gold and paper additions should not both be counted as effective upon prices. In Holland, for instance, the increase does not signify an expansion of credit, for the loans and discounts of the Bank of the Netherlands are less now than before the war. The outstanding notes of this bank amount to \$295,000,000 and its gold reserve is about \$244,000,000. Its notes are almost like our gold certificates. As gold has flowed into the country, it has been deposited in the bank in exchange for notes, the latter being the more convenient form of money, and it not being the custom on the Continent to keep bank accounts for checking purposes. The notes have been put out against gold rather than through loans. And the same is true of the other neutral countries of Europe. Their loans and discounts are generally lower than before war.

Norway, Sweden, and Denmark have passed legislation authorizing the central banks of those countries to decline giving their notes for gold, and the banks have adopted that policy. The reason for this action is that more gold is not needed to support the business of these countries, and its presence is deemed likely to produce speculation and inflation. It isn't in human nature to stand idle with money at command and see other people making unusual profits and not get into the game. This is the secret of the influence of increasing supplies of money upon prices.

Ordinarily, this policy of refusing gold would be considered crazy. It would interfere with foreign trade and stop the exports of the countries adopting the policy. But nothing can stop their

export under present conditions, and this action is taken to compel exporters to either import commodities which are now oppressively high in these countries, or make investments abroad. It sounds very strange to hear of a country's compelling its own citizens to invest their capital abroad instead of at home, but that is precisely the attitude of the Scandinavian countries at the present time. Holland has the same attitude, although it has passed no legislation, but has been taking its trade balance against England in British Treasury bills. The public men and bankers of these countries recognize that, under present conditions, additions to their money supply will be harmful rather than beneficial.

Banking Situation in the United States

The total stock of gold in the United States at the close of June, 1914, was officially estimated at \$1,890,678,000, at the same date in 1915 at \$1,993,549,000, at the same date in 1916 at \$2,636,000,000, and on November 1, 1916, at \$2,700,136,976. The figures for the amount of gold in all banks are not available for these dates, but, including gold certificates, the holdings of national banks and the twelve federal reserve banks and reserve agents at the close of June, 1915, aggregated \$849,352,370, and on the same date in 1916 aggregated \$912,657,000.

The loans and discounts of all national banks, and of all state banks and private banks and trust companies making public reports, on June 23, 1914, aggregated \$15,288,357,283; on June 30, 1915, aggregated \$15,722,440,177; and on June 30, 1916, aggregated \$17,811,000,000.

The loans and discounts and investments in bonds and other securities of national banks were \$8,331,000,000 on June 30, 1914; \$8,824,000,000 on June 23, 1915; \$9,936,000,000 on June 30, 1916; and \$10,212,000,000 on September 12, 1916.

The summary of the condition of all national banks on September 12, 1916, prepared by the Comptroller of the Currency, shows the percentage of cash reserves held by each of the three classes of national banks to have been as given below:

	Actual Reserves per cent	Legal Reserves per cent
Central reserve city banks.....	30.39	18
Reserve city banks.....	24.80	15
Country banks	26.62	12

The central reserve city banks are loaned up much more closely

than the reserve city banks, and the latter are loaned up more closely than the country banks. The latter, however, presumably have their surplus largely with the first two, and the reserve city banks have their surplus largely with the central reserve city banks. The figures for vault holdings are not available at this writing. The federal reserve banks are using their lending powers but slightly.

The reserve city and country banks could largely increase their loans, but in doing so they would have to draw down their balances with correspondent banks or transfer them to the federal reserve banks and the central reserve city national banks would have to reduce their loans materially, although by a less amount than the increase in other banks. Including the federal reserve banks, there is room for large credit expansion upon present reserves, and of course further importations of gold will add to the reserves.

We are interested to know in the first instance what influence this abundant and increasing supply of standard money will have upon business affairs in the United States. Evidently the question is directly related to the so-called quantitative theory of money, which has been a very common subject of controversy among economists.

The Quantitative Theory of Money

The arguments over the quantitative theory are usually so complicated by qualifications and explanations and obscured by various influences affecting the situation that the issue is not very clearly made. Moreover, the distinction between standard money has not always been clearly made. The quantitative theory has been so often appealed to as an authority for inflating the currency by legislative action that many people have become habitually antagonistic to it. The point at which the issue is joined is over the question whether an increase in the volume of money constitutes in itself, or naturally creates, an increased demand for commodities. Those who say no argue that commodities themselves create the demand for each other. A good crop, they say, creates a demand from the farmers for manufactures, and the products of the farm are exchanged for the products of the factories by means of bank credit, the clearing houses, and to a relatively small extent by the use of money. These agencies, they say, are the incidents and conveniences of trade, as are railway cars, but the impulse to trade is back of them all and you can no more create a demand for goods by increasing the supply of money than by increasing the supply of railway cars.

But money is subject to the same influences which affect the value of any commodity. If the supply is increased, more will be offered in the exchanges and the value will be lower. Moreover, the above view overlooks the fact that gold is not only a medium of exchange but the standard of value and basis of credit the world over. Gold is a commodity which has extraordinary range of utility. It is not only money but capital, and the most liquid form of capital. It can be readily converted into any other kind of reproducible property. The man who has \$100,000 of capital invested in a mill may not be able to convert it into cash, but the man who has \$100,000 in gold can hire labor and buy machinery and have a mill in a short time, and that is precisely what he will do if the returns from milling property are long maintained above ordinary interest rates.

It is this universal convertibility which gives gold its commanding influence in the business world, and makes it different from a mere instrument like a railway car. The man who has gold at his command is a possible competitor in every business, anywhere in the world. Experience shows that under normal conditions men will not, for any length of time, sit with idle money in their hands while business about them is prosperous. They may attempt to buy into going concerns, which will bring about a rise of stocks, but after the value of these going properties has risen above the cost of duplicating them there is an inducement to hire labor, buy materials, and construct more plants. In this manner an increasing supply of standard money becomes effective upon prices. The new supply is indistinguishable from the old, it increases the bank reserves, it lowers the rate of interest until it finds employment, and in the process of employment it creates a demand for property and for labor and materials.

It is true that the use of bank credit and modern banking organization economizes the use of standard money, but this means an increase, not a decrease, in its efficiency and influence.

Under normal conditions, the influence of increasing supplies of money in one country is modified by the intimate relations existing between all countries in the modern world. An influx of gold, increasing bank reserves with the subsequent influence upon industry and prices, cannot go far without setting counteracting influences in motion. The country experiencing this phenomenon becomes a good market in which to sell both securities and commodities, the inflow of gold is automatically checked, and the movement possibly reversed. Familiarity with these tendencies has resulted

in the development of a rule of action by the central banking institutions of all countries, through which, by contracting or expanding credits they modify and to a considerable extent control the movements of gold. The theory of this rule is that by arbitrarily contracting credit they may exert the same influence that would result from an outflow of gold, and that by relaxing their grip upon credit they create the same effect that would follow upon importations of gold; and that it is better to have these influences controlled by a responsible and conservative authority than left to the free play of the markets, which are often subject to extreme action and reaction.

Under present conditions, however, all these restraints arising from international relations are in suspension. The fact that prices rise here does not curtail our exports, because the demands are imperative and can be supplied only here, and has but little effect upon our imports, because the foreign supply is limited. With a great trade balance in our favor, gold must continue to come in unless we make foreign loans or repurchase foreign holdings of our securities fast enough to settle our claims.

How Money Works Into Use

The developments of the past year, together with present conditions and tendencies, show quite plainly the natural influence of these gold importations. Our bank loans have increased by over \$1,000,000,000, which is more than double the increase in any previous year of our history. The inducement and temptation to loan-expansion is very great and will increase with further importations. All of the importations go directly into banks. The competition of the banks for deposits has been but slightly, if at all, modified by the plethora of money, as shown by a statement of the City Chamberlain of New York in allotting the deposits of city money for the three months beginning November 1, 1916. He stated that the rates of interest to be paid ranged from 2 to 3 per cent and that the number of banks bidding high rates was greater than ever before. Banks cannot afford to pay interest upon deposits and have the money lie idle; a low rate is better than nothing, and low rates only are obtainable now. A borrower is a benefactor, helping the banks to carry unprofitable accounts. On the other hand, with a demand for all kinds of goods running ahead of supply, and with unusual profits in almost every line, the temptation to borrow for the purpose of buying into going concerns, or for enlarging profitable concerns, or

for starting new enterprises, is very great. But industry is already working to its maximum capacity. The concern which sets out to increase its capacity, or the individual who sets up a new enterprise, must begin by hiring labor away from some present employer by offering a higher wage, and by bidding over competitors for equipment and materials. The effect is to raise wages and prices, and this movement is going on all around the circle of the industries and is bound to go on, so long as bank reserves increase and the profits of industry are large enough to encourage expansion. This competition of a rapidly increasing supply of capital for a limited supply of labor does not increase production, except as that may result from the concentration of labor in the industries that can afford to pay the highest wages, and in transferring labor from the making of current supplies to the construction and improvement of productive works. A considerable share of the present congestion in the steel industry is due to the amount of labor employed in enlarging the steel works. This, however, for the time being, contributes to the rise of prices in the steel products.

Restraining Influences

Undoubtedly the people of this country have been kept under a large degree of restraint by their own sense of prudence. They have recognized that present conditions are abnormal and present profits temporary. Otherwise a stock having \$100 of assets behind each share and earning at the rate of \$40 or \$50 per share per annum would be selling for more than \$125 per share. If the farmers had any assurance that the prices of wheat in the last two years would rule for many years to come, farm lands would advance in value, the farmers would be more active bidders for labor, and the loans of country banks would go up rapidly. The situation is held in check by uncertainty and the full natural effect of such an increase in gold reserves is not obtained.

There are various restraints upon the immediate influence of these increasing reserves. A general readjustment of wages and prices works out gradually. Wages, prices, and charges of all kinds do not change uniformly; custom has much to do with them. Hence a rise of prices, particularly of necessities, curtails the purchases of many people, interferes with general distribution, and thus puts a brake on the expansive tendency. If gold continues to come in faster than it can be absorbed it is dead in the reserves, without effect.

Reaching an Equilibrium

How will the situation work itself out and come into a position of stability again? If the United States was wholly cut off from the rest of the world, and had to look forward to living within itself in the future, wages and prices would adjust themselves, as we see them tending to do, to this stock of gold, and upon such a level that it would require all of this gold to support the exchanges and maintain normal bank reserves.

But we must not only reach an equilibrium between our gold reserves and our level of prices, we must get back to a normal equilibrium between the level of prices, wages, and interest in this country and the level abroad, as before the war. We cannot be cut off from the rest of the world, and when the war is over all the influences which formerly operated to maintain an equilibrium, by the daily movement to and fro of commodities, securities, and gold, will be in operation again. There will be a steady pressure, like that of gravity, until the balance is restored.

Prices After the War

After the war is over and the armies of Europe are returned to industry, and the millions more now engaged in making munitions are returned to the peace trades, the supply of commodities will rapidly increase, presumably prices will decline, and the extraordinary demands upon us fall away. In view of the number of workers looking for employment over there, and the influence of our gold supply upon prices here, it seems likely that costs will fall faster there than here, and judging from past experience we must expect a trade balance against us and a heavy outflow of gold. We shall be gorged with gold, and ours will apparently be about the most uninviting country in the world in which to employ it, by reason of the scarcity of labor and the high cost that will attach to all capital expenditures. On the other hand, Europe will be short of capital and have a large supply of labor, and will be in want of all kinds of goods, equipment, and construction work, to say nothing of her desire to recover her foreign trade. Although there may be an immediate rush to replenish bare shelves from America, or to refit factories with American machinery for the sake of expediting the resumption of industry, we cannot expect that Europe for very long will buy in this dear market the things that she can make for herself. Those countries which have a depreciated currency will have to pay a high exchange rate in

addition to our high prices. Furthermore, in view of our high price level we cannot expect this country to be as favorable a place at which to manufacture for world trade as the European countries. Capital and labor must get together at some spot where raw materials and coal or water power are available, in order to develop manufacturing. We shall have capital after the war but shall not have labor enough to employ it. The labor of Europe and the capital of America will have to be brought together. Will labor come here or will capital go there? One or the other must occur before the equilibrium is restored.

An Export of Capital

Conditions seem to favor the transfer of capital, in the form of gold, to Europe rather than the removal of population from Europe to America. This will certainly be true if costs are going to fall more rapidly in Europe than in America, and, besides, European governments may raise obstacles to emigration.

The natural readjustment would seem to be for gold which is idle here, or if not idle a disturbing factor, to go back to the bank reserves of Europe. It is simply impossible for all of this gold, and the new accretions that are expected, to be employed here. In the first place, we may hope that our people are too cautious to use it. They dare not, in the face of present world conditions, create the huge body of indebtedness which such an amount of gold would normally support. The multiplicity of readjustments in wages, prices, and income of every kind, cannot be made fast enough to enable our people within themselves to support such a development of industry as would be required to employ this amount. The level of prices which would be established by the actual absorption and employment of so much gold would put us far above the possibility of selling anything abroad save a surplus of natural products, and the margin of profit upon these would diminish, thus reducing the purchasing power of the producers. We should be the best market in the world to sell manufactures in, and under these conditions it would be impossible to carry the expansion farther. When goods can no longer be distributed the rise of prices must stop.

Further supplies of gold simply cannot be absorbed. If they stay in the country they must stay as capital which is dead here although needed elsewhere.

The natural development after the war, therefore, is for capital

to go out from this country in the form of gold. If we should fortunately bring down our costs fast enough to hold our normal share of the export trade, this gold nevertheless must go in exchange either for our own securities held abroad or for investments in foreign securities and properties. Our own securities have been coming home in such quantities that it is doubtful whether any important amount will remain abroad which can be dislodged.

The Foreign Appeal to Investors

It is said that our people are inexperienced in foreign investments and will be slow to make them, and this is an uncertain factor in the calculation. Nobody knows where our point of saturation will be. However necessity is a great educator. People, at least some people, learn rapidly where the best profits are to be had. Already approximately \$2,000,000,000 of foreign loans, mainly government loans, running from one to five years, have been placed here, and more are coming. It is said that these will supply offsets against demands for gold after the war, and they will undoubtedly give a good degree of control over the gold movement, but they will probably be refunded or extended, and vastly more of them made. The obligations of the now belligerent governments are likely to look more inviting after the war than they are while the war is in progress, and presumably we can have all we will take in exchange for gold. Germany has borrowed practically nothing abroad as yet, and no doubt her bonds can be placed in the United States after the war in large amounts. The banks in all the countries that have been at war will be eager to clear out the government obligations which they have on hand, in order to clear the way for commercial loans. Then everything in the way of municipal loans and of corporation borrowing that can be shifted to the American market will come to us, just as in years past our municipal and corporation loans have gone to London. Colonial and other government loans and corporation borrowings in all parts of the world will come to us, and if our price level is above Europe's the expenditures under these loans probably will be made in Europe and thus require transfers of gold from here to Europe. There will be enterprises under American sponsorship and management in Russia and other countries of Europe, in China, and South America, with bond and stock offerings on this market. The depreciated currencies of Europe, while serving as a barrier to the importation of American goods, will create a

premium for the importation of American gold. The American investor can take gold there, convert it into a larger amount of currency, and use the latter with which to make his capital investment. The expenditures for equipment for these enterprises which under normal conditions would be made in the United States, will be made in Europe, for even American investors cannot afford to inflate the capital cost of their enterprises in foreign countries above the cost of rival enterprises.

Transfer of Gold Necessary and Inevitable

In short this will be a world market for securities until we are drained of our surplus gold, and interest rates here are back into balance with London, Paris, and Berlin. And there is nothing to object to in all this: it is desirable from every point of view that we release this idle purchasing power, and that the normal equilibrium be restored as soon as possible. It will be well for us to work intelligently to this end.

The Federal Reserve System

One of the first preparatory steps should be to make such amendments in the Federal Reserve Act as are necessary to enable the federal reserve banks to more readily attract this newly acquired gold into their vaults. In their anxiety to decentralize the banking business the authors of this act neglected to centralize the gold reserves, which is the most important requisite of a reserve system. The result is that while the country's stock of gold has increased from January 1 to November 1 by approximately \$400,000,000, the Federal Reserve Bank of New York, upon which the demand for gold for export must inevitably fall, has gained less than \$5,000,000, and all the federal reserve banks together have gained only \$132,000,000. With \$2,700,000,000 of gold in the country there is barely one tenth of that amount in the Federal Reserve Bank of New York, and the really free reserves in the other reserve banks are comparatively small, when considered in relation to the probable demands upon the system after the war. The federal reserve system has not acquired such control over the gold stock of the country as its responsibilities require it to have. It does not compare favorably in this respect with the great central banks of Europe, whose functions it was planned to perform.

The Gold Standard

It has been suggested that the warring countries, having by the end of the war disposed of nearly all their gold, instead of striving and toiling to recover it, may perpetrate a *coup* by demonetizing it, leaving the United States and other gold-holding countries with great stocks of the discarded and depreciated metal on their hands. Although this idea seems hardly worthy of attention it has obtained considerable currency. In the first place it may be said that notwithstanding the disposition of foreign interests, and the creation of foreign debts, Great Britain at the close of the war will surely be a creditor country by a very large balance, and the same will almost certainly be true of France and Germany. But there is another and broader reason why the gold standard will not be discarded. The suggestion proceeds upon the assumption that the world's standard of value has been established wholly by concerted and arbitrary action, and that the world might just as well have adopted silver, or gotten along with fiat money or by the use of an ideal or multiple standard. The truth is that gold came into the position of primacy which it holds among commodities today by a process of natural selection which eventually eliminated all rivals. No other commodity is comparable to it in qualifications to serve as a standard of value and basis of monetary systems. Silver has ranked next to it, and down to about 1870 held the larger part of the field, but silver even at that date was about sixteen times as heavy, value for value, as gold, and as the world has grown richer, the advantage of gold in convenience as the money of international settlements has been decisive. Theorists have always argued that the value of gold was artificial, the result of legislation, etc.; but the fact is that from the dawn of history, among all peoples, from savages to those of the highest civilization, gold has been prized next to the actual necessities of life. It was made money by legislation because it was money before states provided the medium of exchange. No matter what forms of money states may provide, all forms get their value from their relations to gold. We had the gold standard in the United States from 1862 to 1879, although our currency was irredeemable paper, and the market value in this country of every commodity of world trade fluctuated daily in correspondence with the fluctuations of our currency to gold. The wages of labor, however, did not follow so closely the fluctuations of the paper to gold, and the farmer who sold wheat at a country market had one more

fluctuation and extra risk between him and the world's market. Every element of uncertainty between producer and consumer is a barrier to trade, and the business world is always striving to eliminate them. The United States, after many experiments, brought all its varieties of money to the gold standard, for one reason, in order that its producers and wage-earners might receive their pay by the same measure of value by which their products were sold in the markets of the world. Another reason was that capital from other gold standard countries might flow readily in and out without the risk of loss in exchange. With the unit of value of every country fixed in gold, the money of every country has a definite relation to the money of every other country, contracts to buy in one country and sell in another are upon the same basis, risks are eliminated and intercourse is facilitated. It was a triumph of civilization to bring practically the whole world to the use of one standard of value, and the same influences that brought it there, step by step,—country by country, feeling its way—will keep it there. No single nation can afford to leave it, for by doing so it would introduce an element of uncertainty into all transactions between it and other countries. Will Great Britain with her world trade, or Germany with hers, set up independent standards of their own, fluctuating in value from day to day from the standard of their customers? It is one thing to suspend gold payments, temporarily, in a time of war, when as in the case of Germany, foreign trade is suspended, and, in case of England, other considerations are momentarily more important, but it would be a different thing to cut loose from gold. Germany suspends gold payments now to buttress her monetary system and to make more certain her ability to maintain the gold standard after the war.

It is a mistake to imagine that the countries which are below their normal supplies of gold will have necessarily a very formidable task in replenishing their stocks. If a country is low on wheat, dealers all over the world are alert to ship in a supply, and it is the same with gold. If London is a good place to use gold, outsiders will come, bringing their gold with them, to take advantage of the opportunities there. In no other way is it conceivable that capital can be so readily moved to London for use and distribution to suit the needs of the country as by shipments of gold.

A standard for deferred payments may be established by a table

of commodity values, but this means that the amount of money to be paid shall be less or more than a contract sum according to the table. But will the rest of the world do business by that table? And how will balances between countries be settled—by shipping a proportionate amount of all the commodities of the table? Who will keep the commodity reserves? Will the wage-earners have their wages measured weekly or daily, and will the farmer sell his produce, and the grocer fix his prices, by it?

Under the gold standard there has been in every country a currency fixed in its relation to this one value, because redeemable in it, and fixed in relation to all other currencies, because the gold coins could be shipped to another country and converted into the coins of that country. It is an effective world-organization, the practical, automatic advantages of which far outweigh its defects. It is safe to say that if the world modifies its use of the gold standard it will be done by agreement, so that the advantages of a common standard will not be lost. But the business world is conservative, and in no country more so than in Great Britain. Financial affairs in all countries are directed by very practical men, and the traditions and experience of the past, the known opinions and prejudices of the business community at home and abroad, are likely to have very much more weight in determining monetary policies than any scheme of theorists to legislate the value out of gold.

The Gold Exchange Standard

It is true, however, that the warring countries may get along with less gold than they have been holding in recent years and still maintain their currencies at par with gold. Immense gold reserves have been accumulated partly in preparation for war, and this suggests the further query whether the world at the end of this war will be so completely relieved from fear of future wars that it will not care for gold reserves.

No longer ago than the beginning of 1900 the Bank of France held only \$361,000,000 of gold as compared with \$825,000,000 in July, 1914, while the Imperial Bank of Germany held \$111,000,000 in 1900 and \$310,000,000 in 1914. It is less than twenty years ago that Russia, Austria-Hungary, and Italy got squarely on the gold standard. The prime essential for the maintenance of the gold standard is to always have gold enough on hand, together with foreign credits, to supply the gold wanted for export, or be able to sell drafts to meet the business demands. So long

as this is done the domestic currency is not likely to vary materially from the standard. The vast rupee currency of India, estimated at \$800,000,000 to \$1,000,000,000, is kept at the gold standard by a reserve fund in India of less than \$25,000,000 in gold and a somewhat larger amount invested in securities, all accumulated from the seigniorage on the coinage of rupees and interest on securities that have been purchased from the fund. Doubtless such a small reserve would not suffice for a great financial market like London, but the Bank of England down to ten years ago was not accustomed to carry over \$150,000,000 of gold.

Prices Probably Higher Permanently

As we have seen, the gold which has been sent to the United States and other neutral countries since the outbreak of the war has thus far all been taken from the circulation and private hoards or is new from the mines. The banking reserves of the warring countries have not as yet been reduced.

The transfer of this gold to the bank reserves of the United States and other countries, and the increased use of paper money in Europe, undoubtedly, has had and will continue to have, an influence for higher prices, or in other words, to cheapen gold everywhere. In that way it tends to diminish the depreciation of the paper currencies. Further transfers will naturally have the same effect, and the general monetary situation must be said to favor a permanently higher level of prices than prevailed before the war.

GOLD SUPPLY AT THE CLOSE OF THE WAR—DISCUSSION

MURRAY S. WILDMAN.—I find myself in accord with most conclusions reached by Mr. Roberts' paper. The annual product of the mines, supplemented by diversion from the arts, and this condition aggravated by enormous issues of paper, are increasing the world's money supply more rapidly than population or commodities are increasing.

This menace of gold bodes ill for all commercial countries, but more particularly for the neutral nations when long-war conditions are in mind. Assuming that the gold standard remains intact and that belligerents resume specie payments where they are now suspended or increase reserves where the paper is convertible, there will be an immediate movement of gold from America and other neutral countries which will give a shock to our credit structure. However, this outward movement will, in my opinion, be of short duration and extent, and we shall soon receive back and continue to hold more than our share of the world's gold supply. I think this proposition can be conclusively demonstrated.

In order to present the argument for this view it will be convenient to speak of a normal distribution of gold. By this I mean the relative per-capita circulation which existed prior to the war. Let us suppose that we had in this country in 1914 one ounce of gold per capita, Great Britain half an ounce, France three quarters and so on. It matters not how this distribution came about save that it resulted from long monetary and banking habits and trade relations. When any sudden increase of supply would take place, the new gold would spread over the world by additions to the stock of all communicating countries, but the old normal distribution would not be changed. Instead of one ounce, one half ounce, and three quarters, we should have one plus, one half plus and three quarters plus. The old *ratios* would remain unchanged.

But the war has changed this normal distribution so that after peace comes and a short period of readjustment has elapsed a different series of ratios will be found to maintain and the new ratios with larger terms for the neutral countries will be relatively permanent.

The first disturbance of the normal distribution came when governments at war began to issue paper. Whether convertible or not this paper displaced gold, cheapened it, invited the import of goods, followed by the export of gold. A characteristic of a paper circulation is that it tends to become permanent. A shift in the distribution of gold caused by an increase of paper also tends to be permanent.

A second cause for a new normal distribution is found in new credit and trade relations. One cannot deal with this subject in a few minutes, save in a most superficial way, and I shall try not to mention any changes except those that are most obviously certain to occur.

Before the war we were a debtor nation by a large amount. We must annually export gold or goods in excess of our imports. If foreign prices on exportable goods were higher than ours we sent goods. If not we sent gold and continued to send gold until our price was lower than the foreign price. Of course it was not general prices but particular prices of exportable goods which determined whether goods or gold would be shipped. Suppose that all exportable commodities be represented by one such as wheat. If the Liverpool price of wheat was high enough we obtained the necessary exchange by a shipment of wheat, but if their price was too low we shipped gold, and gold would continue to go abroad until our general price level—including the price of wheat—fell low enough to export wheat rather than gold. By this process of adjustment our normal distribution of gold was established and maintained.

After the war, if we remain neutral to the end, we shall find ourselves in one or two situations; we shall remain a debtor nation with a small debt and small annual charge, or else, if the war continues long, we shall be a creditor nation with an annual credit balance. In the first case our annual loss of goods or gold will be less. In the second case there will be an annual gain of gold or goods instead of a loss. The net result will be that our price of importable goods must be higher than that prevailing abroad or else gold will come to us until our price level is raised to the point of profitable importation.

In objection to this view it may be urged that when we talk of exports and imports we are talking of different goods, and that a high foreign price of wheat is consistent with a low foreign price of coffee, and that the old normal distribution of gold may be maintained by merely reducing our export of wheat as our annual interest charge is reduced, or increase our import of coffee if an annual credit balance should appear.

This objection would be sound if coffee and wheat were interchangeable in consumption, but they are not interchangeable nor are imports and exports generally interchangeable. In this case, as in so many, we must assume that our habits of consumption remain unchanged, at least for a considerable period. If we admit that assumption we cannot avoid a continuously greater stock of gold and a permanently

higher price level than we should have experienced in our traditional status as the world's greatest debtor nation.

I can think of no legislative measure likely to counteract this tendency. Protective duties might aggravate it. In the course of time there would be a relatively larger home consumption of goods which formerly entered into our export trade but to which foreign markets have become less hospitable. There would be a tendency to increase the variety and range of imported goods if they are allowed to enter freely, but the excess gold supply already reached would hardly be diminished.

E. M. PATTERSON.—With most of the statements made by Mr. Roberts there is little ground for disagreement. That we are experiencing a very great influx of gold, a supply that is secured from the mines and from the circulation of the leading belligerent countries, is well known. Because the belligerent countries have many selfish reasons for maintaining the gold standard it seems probable that gold will not be demonetized. There will be strong influences operating after the war that will tend to take from us at least a part of our large supply of gold, but the withdrawal of this gold is something that should not be looked upon with dread provided it can be kept under proper control.

The problem of controlling this gold movement is one that will differ only in degree from the problems of gold control in ordinary times. In the past the United States has probably been the freest gold market in the world. We have been unable to attract gold as we need it from other countries if at the same time they were desirous of retaining it. When they wished to take it from us we have been unable to prevent the export. This was illustrated in the fall of 1913. At that time we were feeling some strain in our markets and needed to import gold for relief. An attempt on our part to do so was met by an increase in the discount rate of the Bank of England and the shipment was canceled. At the same time Canada was exporting large quantities of goods and securities. Her bankers sold in New York the London exchange drawn against these exports and then withdrew gold from New York to Montreal. We were unable to prevent the exportation of this gold and at the same time could import none.

There will be two main influences on which to rely in the future. The first is the aid and coöperation of our banks. Doubtless the

need for control will be fully appreciated by them and considerable unity of action may be secured. Particularly will they be able to rely on their holdings of short-time foreign government securities, of which there have been accumulated a large amount, approximating at the present time \$2,000,000,000. As market conditions warrant and as these mature, it is probable that our banks will as a matter of self-interest dispose of these holdings, refusing to renew them at maturity in case such renewal would mean the withdrawal of unduly large amounts of gold from the United States.

To a considerable extent, however, we must hope for assistance from the federal reserve system. One may agree with the assertion that this system is not yet working as effectively as the foreign central banks and at the same time acknowledge that its influence is growing and that its possibilities are very great. Some of the phases of the system that frequently escape notice and that may be of advantage in emergencies are the following:

1. The rediscount rates of the various reserve banks may be altered. If the demand for funds is particularly heavy and results in a considerable amount of pressure on the reserve banks and on their supplies of gold, these discount rates may be raised and the raid on the reserve banks' gold holdings checked. How effective this will be in practice remains to be seen, as the reserve banks have as yet had no opportunity to use their influence in this direction.

The significance of this control through the discount rate is determined largely by a consideration of the amounts of gold that will be in the hands of the federal reserve banks and hence subject to their control. This gold is of two kinds. There is first the gold held in the reserve of the federal reserve banks as a part of their assets. In the second place there is the gold that has been accumulated now to the extent of about \$280,000,000 in the hands of the federal reserve agents behind the federal reserve notes, of which there are over \$300,000,000 outstanding. These two supplies of gold at the present time total between \$700,000,000 and \$800,000,000. This is no small sum when one stops to realize that the reserve banks have been in operation only about two years. Under the circumstances one might wish that it were larger but it is large enough to be of very considerable importance.

2. The reserve banks have accumulated considerable holdings of United States bonds and notes and also are in a position in time of stress to sell these bonds and notes, as well as some of their holdings of

municipal warrants, without danger of much loss through depreciation. This will tend to tighten the money market, give to the reserve banks more control over funds, and is a method that is resorted to frequently by the leading central banks of European countries.

3. The reserve banks may also borrow gold on the market, offering some of their bonds, notes, and warrants as collateral security. This practice also is followed by central banks abroad.

4. Through their participation in foreign exchange transactions the reserve banks are coming into possession of considerable amounts of credit abroad. The acquisition of these holdings will tend to lessen the importation of gold now and at the same time will furnish to our federal reserve banks accounts against which they can later sell exchange if they desire to influence the exchange rates and keep them below the gold export point. Just how important this control will become remains to be seen, but it is worth while to note that an interesting beginning has been made by the designation of the Bank of England as the English agency of the Federal Reserve Bank of New York. It is also reported that similar arrangements are to be made with the Bank of France, the Bank of Germany, and other institutions.

5. Finally there may be mentioned the possibility that a mere disapproval by the Federal Reserve Board, a disapproval expressed or merely implied, may have considerable influence. It is well known that such disapproval is a very potent influence in Germany and in certain other countries. If the Reichsbank or German government considers it inexpedient for gold to leave the country, gold does not go, even though the rate of exchange would seem to warrant an export movement. How soon, if at all, our Federal Reserve Board will acquire a similar influence over gold shipments is uncertain. It is interesting to observe, however, that quite recently a mere expression of disapproval by the Federal Reserve Board caused our bankers to change their plans for investing their funds in English Treasury bills. It is a matter of great interest and importance that our Federal Reserve Board has in so short a time acquired a position of such influence.

How effective any or all of these devices may be it is impossible to forecast. That the Federal Reserve Board is aware of such weaknesses as may exist, is evidenced by the various requests to Congress for amendatory legislation by which the ability of the reserve banks to secure and control the gold supply will be increased. Some of this legislation was passed at the last session of Congress and it is hoped that still more progress will be made at this one.

DON C. BARRETT.—Mr. Roberts holds that much gold will flow from us when the war closes and views such prospect with equanimity. Other gentlemen hold that we may not lose much gold and are inclined to feel disturbed at the thought of any considerable outflow. The question is one of relative level of prices. Whatever may be the redistribution of the world's gold supply in the long run, it seems probable that we shall lose a very considerable quantity temporarily at least. One of the chief reasons is that the industrial organization of the belligerent countries is in a markedly more abnormal state than that in which American organization finds itself. English and European industries have been almost completely transformed for the purpose of producing war materials, while our industries, in spite of the fact that we are exporting large quantities of munitions, are for the most part organized for the production of the same kinds of goods as they will be called upon to produce after peace is declared. The scale of readjustment in the belligerent countries will therefore be much greater than with us. The credit operations of various sorts which are now supporting their industries must be weakened and materially diminished during the period of enforced readjustment, and especially in the initial stages of readjustment. The withdrawal of this supporting credit structure will cause a decline, more or less serious, in their price level. This decline is likely to take place in spite of efforts which different governments may exert to support business interests in order to prevent it. Since industrial readjustment in America will be on a relatively small scale, credit operations supporting industry will be interfered with relatively less and the decline in the American price level will, for some time at least, be relatively slight. The consequent tendency will be for gold to flow from us in considerable amounts—eventually of course inducing a decline in prices.

Whether this outflow of gold will bring a crisis in American business circles depends upon the attitude and action of our business men. If they are unduly optimistic and attempt to maintain extended credits, they are liable to encounter much difficulty. If they are cautious as to the future and draw in their credit operations, they will probably escape any serious crisis—precisely as did business men at the close of the Civil War. In that earlier event most men, being sure a crisis was coming with the declaration of peace, prepared for it by diminishing their credits and holding to conservative business; and then naturally, as a consequence, the crisis never came. History may repeat

itself and business men may not be injured by an outflow of gold to anything like the extent many of them now anticipate. The steadying influence of the federal reserve system may promote this outcome.

MR. ROBERTS.—I did not mean to say that I thought gold would go out until we had lost all that had been acquired during the war. I think there will be a redistribution of gold under the influences which normally give each country a share proportionate to its wealth, a share of the world's trade, banking customs, etc. I think our normal share will be greater after the war than it was before, but I do not think it will be anything like great enough to retain all the gold we have received.

Answering an inquiry, I would say that demand and supply undoubtedly have an immediate influence upon prices. Under this influence prices are expected to fall after the war. At a lower level of prices, and with a reduction in the volume of business, less money and credit will be required, and we shall not use the amount of gold we have received. If we do not need it and cannot use it, I do not think we shall retain it. The point I have endeavored to make is that the amount of gold which we shall have at the end of the war, if actually absorbed and in use, would require a level of prices impossibly high. Other influences will dominate and compel a lower level of prices; hence, in my opinion, a considerable portion of our newly acquired gold will be naturally released for transfer to the countries which need it more than we do.

It is true that movements of this kind do not work out in experience as smoothly as in theory. Tariffs may prevent the importation of goods, and the inexperience and hesitation of our people as purchasers of foreign securities may retard the movement of securities. I think, however, that means will be found to transfer a considerable amount of gold.

LOANS AND TAXES IN WAR FINANCE

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All great wars in modern times have been mainly financed by means of issues of paper money, government and bank notes, convertible and inconvertible, and by borrowing. Convertible paper money has narrowly limited possibilities and can only serve as an adjunct to other financial measures. The financial possibilities of inconvertible paper money, though more considerable, are also quite inadequate to meet the huge expenditures of a great war. Except as an extreme measure of last resort, paper money has therefore come to occupy a subordinate position in war finance. The accepted policy, one the effectiveness of which has been tested by much experience, is to issue paper money sparingly and to secure the bulk of the funds required for war by means of loans. It is commonly believed that if additional taxes are levied during the conflict, sufficient to take care of increasing interest charges, a sound and equitable financial policy has been adopted and that to meet even a small part of war expenditure currently from taxation is a counsel of perfection.

The limitations on the possibilities of paper money as the principal means of financing a war are due to its direct effect on prices. The amount of paper which must be issued is so great that it depreciates rapidly and soon becomes practically worthless. Borrowing has greater possibilities if the people generally subscribe to the loans. It does not necessarily and directly bring about an advance in prices, since a part of a stationary volume of the purchasing media of a country may be used over and over again, as it is secured by the government through successive loans. Changes in the volume of trade or in the rapidity of circulation of money may come during a war and occasion some change either upward or downward in the level of prices. A war will also inevitably cause violent changes in the prices of particular commodities. But in the absence of any increase in the volume of the purchasing media there would necessarily be no considerable rise in the level of prices, unless a country is fast approaching a condition of economic exhaustion.

It is not, therefore, absolutely inevitable that war finance based on borrowing should cause a general rise in prices. It is significant, however, that whenever governments have resorted to this

policy prices generally have manifested a marked and continued upward tendency; though of course to no such degree as when the attempt has been made to finance war by means of issues of paper money.

War loans would not cause an advance in the level of prices if subscribers to the loans made payment entirely either with accumulated funds on hand or with savings made from current income during the period that the proceeds of each successive loan were being expended. In these circumstances the abnormally large demand of a government for goods and labor would be roughly offset by the curtailed demand of the people generally. But the funds secured by governments through war loans are never derived entirely from savings on hand or which become available while the proceeds of a loan are being expended. Voluntary saving is never sufficiently inclusive and rigorous. Even though greater economy is practiced by most people than in times of peace, subscriptions to successive war loans invariably exceed current savings. Many subscribers borrow from banks the funds required to meet their commitments, pledging other property and even the war loan itself. The banks adopt a liberal patriotic loan policy and also subscribe largely on their own account. These transactions, the borrowing from banks and the investments by banks, occasion expansion in the volume of credit, both in the form of bank notes and of deposits, and are the most potent single cause of the general advance in prices during periods of war. Purchasing power in the possession of the people is reduced by the loan, but not to the full extent of the purchasing power secured by the government. With this purchasing power the warring government enters the market for goods and labor in competition with its own citizens. The government demand is so insistent that it is not lessened by advancing prices. There is simply a more speedy exhaustion of the proceeds of the loan. On the other hand, the demand of the people for goods and labor is reduced in consequence of rising prices. Through this roundabout process a smaller part of the total current products of industry is consumed by the people in the ordinary ways of peace, and a larger part in the shape of military material of all sorts is secured by the government and consumed in the channels of war.

In the course of time, as the proceeds of a loan approach exhaustion, a larger proportion of the total volume of the purchasing media of a country gets back to the people. Another loan is

then required unless the government is to resort to unlimited issues of paper money. The successful flotation of a new loan or the continuous sale of short-time obligations again provides a government with the means to enter the market in competition with its own citizens. This process of borrowing and spending can continue for an indefinitely long period if the people are prepared to make the necessary sacrifice of income, and provided also that not too great a part of what is subscribed to each loan consists of additional borrowing from or investment by banks, involving further credit expansion. In other words, a considerable part of each loan must represent savings, a sacrifice of current income on the part of subscribers; otherwise credit expansion will be so rapid as to threaten with collapse the entire credit structure in a fashion analogous to that which results from issues of paper money.

Even if there is an increase in voluntary saving during the course of a war, it is unlikely to be sufficient to counteract fully various influences tending toward a continuous upward movement of prices with each successive loan. With the progress of a long war the output of commodities of all kinds can hardly fail to undergo some diminution as more and more men are required for military service. No corresponding contraction in the volume of the purchasing media is, however, to be anticipated. On the contrary, as a means of facilitating the marketing of successive loans, a policy of continuous, even though moderate, credit expansion is practically certain to be adopted. An easy money market is a desirable, one may even say an essential, condition for carrying through the distribution of a government loan among investors. The process of marketing must be made as easy and simple as possible. Slowly expanding credit and the issue of short-term obligations which may be converted into long-time loans are most helpful devices. Credit contraction is naturally out of the question. Thus while the vital importance of strict economy is being everywhere urged, these easy monetary conditions enable many to satisfy their patriotic impulses by borrowing the funds which they subscribe to war loans, and at the same time postpone the sacrifice of accustomed luxuries and comforts to a more convenient season. Among those also who practice the most rigid economy there are many who subscribe by means of loans much more than they have been able to save. So far as the individual is concerned, future savings are invested in advance when he borrows in order to subscribe to government loans, but until he pays off his loans the ar-

rangement commonly involves an increase in the volume of credit and so contributes to the advance in prices.

It is also to be noted that the initial advance in prices works against that general discontinuance of all unnecessary consumption in order to subscribe to war loans, which is needful if still further price advances are to be avoided. A war inevitably causes radical changes in many incomes. Those engaged in the production of articles for which there is an intense government demand secure exceptionally large wages and profits. Meanwhile the incomes of those engaged in a large number of other pursuits remain stationary or decline. Changes in income would be numerous even though the level of prices remained stationary. Both the number and extent of these changes are, however, much increased in consequence of rising prices. While the real income of the vast majority is reduced, that of a considerable number is enlarged in some instances to an extraordinary extent. These undeserved and temporary gains tempt many to extravagance in consumption. During the tragic course of the present war, the increasing readiness of the peoples of the warring countries to impose additional taxation is at least in part due to the desire to check positively indecent extravagance on the part of those whose incomes have been thus undeservedly increased.

All these conditions and tendencies have been present in the various belligerent countries during the present war. The crisis occasioned by the outbreak of the war, the readjustment of industrial activities, as well as the expense of mobilization, were in a large measure financed through the banks. In Great Britain, where checks are generally used, there was an unparalleled increase of credit in the form of Bank of England deposits. In continental countries there was an analogous increase in bank notes issued by the great central banks. As in the case of an ordinary financial crisis, this expansion of bank credit was a proper and effective means of meeting the sudden requirements occasioned by the outbreak of the war. Unlike the usual course of events following crisis, however, there was no contraction of credit after the period of initial strain had passed. On the contrary, the volume of credits has tended to increase from month to month. Rates for short-time loans have been maintained in the various European money markets in the neighborhood of 5 per cent throughout the war. In both France and Germany there has been something like a threefold increase in the note issues of the central

banks of those countries, and in Great Britain a corresponding increase in the deposits of the Bank of England. Deposits in other banks in all the belligerent countries are also vastly greater than they were two years ago. In the meantime prices everywhere have advanced, the index number of the *Economist*, for example, registering an advance from 116.6 in July, 1914, to 153.2 in October, 1915, and to 217.1 at the end of November, 1916.

Borrowing as the principal means of financing a war, it will thus be seen, has some of the defects of paper money. Though not so directly nor to so great an extent, the borrowing policy is practically certain to involve a general advance in prices, which in turn increase the money costs of a war and also cause much undesirable variation in incomes. Against war finance based on borrowing there are, however, other and far more serious objections. It is manifestly unjust and inequitable because it gives not only to property acquired before a war but also to income received during its progress a far higher degree of consideration relative to life than is accorded to them in times of peace. In adopting the borrowing policy a government accepts in the field of finance the voluntary principle without qualification. Interest as a reward is offered at whatever rate is required in order to secure the necessary funds. An analogous situation would present itself if governments relying entirely upon voluntary enlistment offered successive increases in the pay of soldiers whenever the supply of volunteers was inadequate. When wars were waged by small professional armies, the appeal to economic motives was effective in securing an adequate number of recruits. Such appeals obviously would not provide the large armies engaged in modern warfare. Voluntary enlistment from patriotic motives has been tried, but its inadequacy as well as its lack of equality in sacrifice has been made apparent during the course of the present war. Compulsory service will certainly be the policy adopted by belligerent countries in all future wars. Immediate military exigencies will compel resort to this method of raising armies.

Conscription of men should logically and equitably be accompanied by something in the nature of conscription of current income above that which is absolutely necessary. The obligation that each citizen furnish the state in case of war a large portion of his current income manifestly would impose no more oppressive burden than the obligation of military service. To be sure, the pressing necessity which leads to compulsory service is absent

since it is possible to finance a war by means of borrowing. Yet as a permanent war finance policy, borrowing has limitations which should exclude it from any comprehensive scheme of military preparedness. Modern wars are so enormously costly that a country which resorts to borrowing has not merely created for itself a difficult problem of taxation after the return of peace; it has also placed itself in a financial position which will make it exceedingly difficult to find the money to maintain and improve its military establishment in future years; it is also likely to find itself quite incapable of financing another war in the near future. Purely as a military measure, then, the conscription of income during a war should be adopted unless such a policy would prove in any way a serious obstacle to the effective conduct of hostilities.

The injustice of treating those who provide the funds for war purposes more generously than those who risk life itself will not be questioned. Consider for a moment the contrast under the borrowing method of war finance between a soldier in receipt of an income of \$2500 before a war and his neighbor who remains at home in continued receipt of a similar amount. The civilian reduces his expenditures in every possible way and subscribes a total of \$4000 to war loans. He is rewarded with a high rate of interest to which his soldier neighbor must contribute his quota in higher taxes if he is fortunate enough to return from the front. The contrast becomes still greater if, as often happens, the income of the stay-at-home increases during the war and if he is able to secure a superior position. On the other hand, the soldier often finds it difficult to secure a position as good as that from which he was taken at the beginning of the war.

But if borrowing as the principal means of financing a war is so evidently unjust, it is pertinent to inquire why this policy has been so generally adopted and approved. The explanation is in part found in a common misconception regarding the relative importance of the various sources from which the funds subscribed to war loans are derived. Not infrequently it seems to be supposed that war expenditure involves something like an equivalent devotion to war uses of capital and other wealth which were in existence before the outbreak of hostilities. To an audience of economists it hardly needs to be observed that in any event the greater part of war expenditure is derived from current income, most of which but for the war would have been devoted to the satisfaction of individual wants and so completely consumed.

Most of the capital and other property in existence within a country at the beginning of a war is not and cannot be converted into funds with which to prosecute the conflict. Property can, of course, be sold and the funds secured from the sale subscribed to war loans, but such transactions are merely transfers and do not increase the amount of funds within the country available for war purposes. Aside from the sale of securities in foreign countries and the exportation of gold and other valuables, a country cannot convert any large part of its past savings into uninvested funds. Modern warfare requires the use of a large part of the capital equipment of a country and it must therefore be maintained throughout the contest in a high state of efficiency. A part of the capital invested in a plant which cannot be employed for military purposes may, indeed, be idle because there is no demand for its products. Factories for the production of luxuries may be taken as an example; though it may be noted that during the present war some use has been found for nearly every variety of factory and workshop. Factories for which a use cannot be found may not be kept in repair during a war, and if it lasts long enough may fall into complete decay. The loss will be one of the costs of the war but will in no way contribute anything toward necessary military expenditure. Capital in the form of stocks of goods may gradually become available as the proceeds of sales are invested in government loans rather than in the replenishment of stock. Similarly, durable goods in the possession of consumers, such as clothing and furniture, may be made to last an abnormally long time and only absolutely necessary replacements may be made. In this way the accumulated possessions of the people may contribute to the conduct of a war, not by being used directly, but because they enable the people to devote a larger portion of income to war purposes than would be possible if at the beginning of the war their personal belongings were less abundant and durable.

In these various ways a considerable amount of funds for war purposes can be extracted from the capital and other property in existence before the outbreak of hostilities. A borrowing policy (aside from foreign loans) which should limit borrowing to antebellum wealth which might become available for new investments, would be entirely consistent with the equities of the situation created by war. But by far the lion's share of the funds subscribed to war loans is not derived from this source. It represents new savings from current income and the curtailment of in-

dividual consumption brought about by rising prices. If all these savings, and also the income which might have been saved but is in fact expended, were taken by the tax gatherer, it is certain that there would be slight need for domestic borrowing. Much of the preëxisting capital as it became available for new uses could be reinvested in those particular branches of industry in which additional facilities seemed to promise satisfactory returns.

General acquiescence in the policy of borrowing for war purposes is by no means to be attributed solely to misconceptions regarding the relative importance of the sources from which funds subscribed to war loans are derived. It is also commonly believed that by borrowing the burden of war costs is shifted from the present to future generations. Such shifting is in large measure illusory. A burden can indeed be placed on future generations, but the generation conducting the war does not escape. A nation at the end of the war is poorer by the amount that its capital and other wealth is less than it would have been if there had been no war. This loss is inevitably greater if the borrowing rather than the taxation policy is adopted, because, as we have seen, borrowing does not reduce unnecessary consumption to the greatest possible extent.

Taking a community as a whole, a war debt is of course in no sense an asset. This would be evident enough if the ownership of the debt was distributed among the people in exact proportion to the additional taxes which they must pay in order to meet interest and sinking fund requirements. Owing to the manner in which the debt is in fact held, it alters to the disadvantage of the great majority of the people the distribution of the total income of the community. On the return of peace those who served in the armies will, generally speaking, enjoy a smaller share in the national dividend because they were deprived of the opportunity to earn income from which savings might be made for subscriptions to war loans. Large numbers of those who remain at home either because of a decline in their incomes or on account of advancing prices are also unable to save their quota of the war debts, and consequently find themselves in a less favorable position than at the beginning of the war. A fortunate and perhaps more thrifty minority become owners of the government debt and enjoy a rent charge on the income of the community which continues until the principal of their claim is returned to them.

There is one conceivable arrangement under which the burden

of a war debt might be transferred entirely to future generations. If interest did not begin to accrue on the loans for twenty or thirty years after they were issued the generation conducting a war would escape. Even so, the immediate relief would be less than that which might be secured if the war were financed by taxation. Extravagant consumption would not be so completely curtailed and consequently to a somewhat greater extent the war would be financed from capital existing before the conflict which might become available for new investment during its progress. But this plan is obviously impracticable. Inasmuch as loans cannot be floated on a deferred interest basis the generation which conducts a war by borrowing must shoulder an increased burden of taxation for the benefit of those who were fortunate and prudent enough to subscribe to government war loans.

To war finance based mainly on borrowing there are, then, fundamental objections. During the years immediately following the conflict it impairs the ability of a country to keep up its military preparations, to say nothing of its power to undertake another war. It accentuates the redistribution of incomes during a war. It is unjust to all those who serve in the armies and also to many who remain at home. It enables a small section of the population to enjoy undiminished or enlarged incomes which are either expended extravagantly or become a claim upon the income of the community for an indefinitely long period in the future.

But although in all these ways borrowing as a means of financing a great war is most unsatisfactory, it has one advantage which cannot be questioned. It works. If a people are heartily in favor of a war, directly through the funds subscribed to loans and indirectly through the forced economy of those with stationary or declining incomes occasioned by rising prices, governments can secure command of a very large proportion of the labor force in a country and the use of much of its capital. Large armies can be formed and supported and enormous quantities of military supplies can be produced. Even though the burden is unevenly distributed, the transfer of labor and capital from the activities of peace to those of war is successfully accomplished.

It boots nothing, therefore, to dilate upon the equity and remote advantages of taxation over borrowing, unless it can be shown that by some other method the productive forces of a country can be as speedily transferred and as effectively exerted in the production of the large and varied supplies of material required

in the conduct of a modern war. Equity would indeed sanction taxing away all income received during a war in excess of that which each citizen had received during the year preceding the conflict, and also so much of ordinary income as was not needed for absolutely necessary consumption. Taxation on this onerous scale would virtually eliminate the ordinary economic motives for effort and sacrifice. What would be the effect on production? There is no experience whatever on which to base a judgment. I venture to think, however, that no serious difficulties would be encountered when millions of men were fighting in the trenches during a great war in which a people believed that its vital interests were at stake.

In the first place, it may be stated with confidence that all the various considerations of which account must be taken in framing a permanent taxation policy have no bearing when it is a question of taxation for a limited period and for a specific purpose. Accepted canons of taxation and most economic principles have no application amid the conditions which develop during a great modern war. It is not necessary, for example, to take account of the effect of onerous taxation on saving and on the investment of capital. It is the avowed purpose of the state to secure through taxation all that can be saved. Onerous income taxes will not weaken the motive for maintaining the capital which was in existence before the war, because it will become the basis for the accustomed return to its owners upon the restoration of peace. In any event, whether the state borrows or taxes there will be less capital at the end of the war than at the beginning. But as we have seen, a greater part of the capital of the country is likely to be absorbed under the borrowing policy because it does not reduce individual consumption to the greatest possible extent.

It would seem at first sight that if no income could be saved for investment during a war serious difficulty might be encountered in securing the necessary additions to plants required for the production of munitions and other military supplies. Experience during the present war, however, proves quite conclusively that these requirements are too great and immediate to wait upon the slow processes of the adjustment of facilities of supply to demand working through prices and business profits. The warring governments have been obliged to undertake the erection or direct control of plants and the organization of production, not only of munitions but also of other indispensable articles. Much has of

course been done by private enterprise but commonly under conditions which guaranteed against loss. Both these methods would be equally feasible even though there were no new savings available for investment. Within moderate limits, the cost of converting plant to war uses could be charged as at present to operating costs and not to capital account. Much capital also would become available for investment through the liquidation of capital in branches of industry unfavorably affected by the war. It would also be quite possible, and indeed this has happened during the present war, for governments to make advances of funds to private concerns for capital expenditure.

During a great war it would also seem that the chance of making large profits is not needed to secure persistent effort and readiness to assume business risks. Patriotic motives in the business and financial world even now in some degree take the place of ordinary economic motives, even though no strong appeal has been made to them. But it is also to be noted that business risks are far less than in times of peace even under conditions as they develop when a war is financed by borrowing, and these risks would be still further reduced if the taxation policy were adopted. In any event, the warring state takes a leading rôle in determining the direction of production. A large part of the total output of industry is in response to government orders. Those who supply the wayward demands of the few whose incomes have been increased by war do indeed incur serious risks. But if all income were heavily taxed there would be little or no demand of this character. Marketing risks would be reduced to a minimum, since virtually all the labor and capital of a country would be employed in producing articles of necessary consumption and military supplies.

Finally it may be observed that the evident justice of a policy under which no one would reap an economic benefit from a war, even though it might cause some relaxation of effort on the part of a few, would certainly stimulate the vast majority of people to greater efforts. In England, for example, during the present war, the large gains and extravagance of a few have caused serious discontent in labor circles, a grievance which was in some degree finally removed by means of the excess profits tax.

The abrupt curtailment of individual consumption which would come with the adoption of this taxation policy would occasion no serious disturbance in the labor markets. In all the warring countries it has been found necessary to utilize the labor of women to

an unprecedented extent. The enormous number of men absorbed in the armies, together with the large government demand for goods, has much more than offset the reduction in the demand for labor in various peaceful pursuits.

More serious difficulties might be encountered by those having capital invested in the luxury trades. But thanks to the great variety of modern military requirements, a use can be found for much plant of this kind. It is reported, for example, that during the present war even candy kitchens and photographic studios have been utilized. Supplies of articles of luxury on hand can largely be disposed of in neutral markets. Moreover, the consumption of luxuries in a warring country would not be entirely discontinued, if as they properly should be, rates of taxation were so limited as not to occasion a serious change in the standard of life of any class in the community. During a great war it would be entirely equitable to tax far beyond the limit set by the standard of life, but practical considerations forbid. Taxation which would make necessary revolutionary changes might well occasion a greater loss in efficiency than would be offset by the gain in revenue. To take anything like half of incomes of say \$3000 would be equitable, but it would involve changes in the manner of living which could only be made with the very greatest difficulty. On the other hand, to tax 50 per cent of incomes of \$40,000 or 90 per cent of incomes of a million or more would still leave enough to permit in all essentials the maintenance of the standard of life to which the recipients of such incomes are accustomed.

It is of course impossible to determine in advance of experience just how far it would be possible to go in financing a war by taxes on income. Tentatively, and mainly for illustrative purposes, the following scheme of taxation may be suggested. All incomes, or at all events 90 per cent of all income, in excess of the average annual income received during the two years preceding a war should go to the state. This proposal simply involves an extension of the excess profits tax which has been adopted very generally during the present war. In addition ordinary income should be taxed "to the bone" but not beyond the point which would still leave every class of taxpayers sufficient income to maintain the essentials of its customary standard of life. Let us assume as a starting point a special war tax of 5 per cent on incomes of \$1500, or perhaps \$1200, of 10 per cent on incomes of \$2000 and of 20 per cent on incomes of \$5000. By successive stages the rates

would be increased until 50 per cent of incomes of \$40,000 and, let us say, all income in excess of \$100,000 were taken by the state during the period of the war. These taxes would after all represent nothing more than patriotic citizens might be expected and urged to save and to invest in government loans under the borrowing policy of war finance. The imposition of these taxes would of course require a reorganization of all war charity, but the alleviation of much of the distress occasioned by war which is now left to private benevolence is properly a government function and could be far more effectively handled through its agency. In addition to taxes on income, special taxes on a few articles entering into general consumption should be imposed. A tax on sugar of five cents a pound, with correspondingly heavy taxes on tobacco and beverages, alcoholic and non-alcoholic, would presumably be sufficient for the purpose of reaching those whose incomes are too small to warrant resort to direct taxation. A high tax of say fifty cents a gallon on gasoline and on other articles of which enormous quantities are required for military use would also be advisable.

A war finance policy based on taxation presupposes that a country must have established and in operation highly developed income-tax machinery in time of peace, so that it may have at its disposal full information regarding the income of its citizens. It would also seem essential that the policy should have been carefully considered and that the people should have definitely decided in favor of its adoption as an integral part of its military program. It would indeed be highly advantageous to enact legislation authorizing the imposition of war rates of income taxation by executive proclamation upon the outbreak of hostilities. It might also prove advisable to provide that the tax rates to be imposed at the outset should be at half the rates which would become effective at the end of a period of six months of war. By that time the initial disturbance occasioned by the outbreak of war would have passed and it would be possible to judge with some certainty whether the country was engaged in a long and arduous contest.

This paper is primarily concerned with the underlying principles which should determine financial policy in time of war. But a few matters of less fundamental importance may be given passing consideration. As regards the proposed income taxes, a single annual collection would be unsatisfactory on fiscal grounds. The

enormous payments to be made might seriously dislocate the banking machinery of a country. Monthly or quarterly payments would in large measure meet these difficulties. Payment of the taxes at frequent intervals would also reduce to a minimum loss of revenue from irresponsible individuals who otherwise might spend in extravagant consumption the funds which should have been set aside to meet the tax on their incomes. It would also be desirable to provide that tax payments might be made in short-time interest-bearing obligations of the government. Purchases of these obligations by those subject to income tax would provide a government with a reasonably steady supply of funds probably quite as effectively as under the present financial policy based on borrowing. In order to provide a comfortable working balance and to meet initial expenditures, a government loan at the beginning of a war would probably be necessary. Such a loan, absorbing uninvested funds accumulated before the conflict, would not run counter to the equities of the situation created by war.

War finance based on taxation has many advantages over either the paper money or the borrowing policy. One of these advantages, even though it is not the most important, may properly be given special consideration, because it would contribute much to the feasibility of the taxation policy. Both paper money and borrowing, as we have seen, are certain to bring about a general advance in the level of prices. It will, I think, be readily granted that a belligerent country which financed itself entirely (aside from foreign loans) by means of income taxes, supplemented by taxes on a few commodities, would experience little or no advance in the general level of prices. There would be no influence at work tending toward an increase in the total volume of its purchasing media. Surely not many would seek loans from banks for the purpose of maintaining accustomed expenditure, and banks certainly would not give favorable consideration to such loans. Prices in neutral countries would of course advance if they were resorted to for supplies on the scale witnessed during the present war. But it is one of the advantages of the taxation policy over borrowing, that it would greatly reduce the volume of goods imported to a warring country. Imports of luxuries would inevitably fall off. Moreover, owing to the smaller demand for luxuries produced at home, more labor would be set free for the production of necessities and of military supplies, thus in turn reducing importations of such commodities.

The adoption of the taxation policy would not of course eliminate all changes in income during a war. It would, however, diminish the number of such changes and also confine them within narrower limits than is possible under the conditions of rapidly rising prices, which are found whenever a war is financed by means of paper money or borrowing. Comparatively stable prices would facilitate the execution of the income-tax policy in two ways. In the first place, the amount of excess profits as well as the number in receipt of such profits would be far less considerable than has been the case in past wars. And second, the special war tax on ordinary income would occasion less disturbance, since the necessary curtailment of expenditure would be more exactly estimated by the people generally if something like the accustomed level of prices were maintained. To those in receipt of stationary incomes of moderate size, it may be added, the proposed taxes would be less burdensome than the deprivation resulting from the rise of prices under the borrowing policy in the countries now at war.

The avoidance of rising prices is by no means the most important of the advantages to be derived from financing a war by taxation rather than by loans. There are indeed a number of other advantages which are of decidedly greater importance. To finance a war to the greatest possible extent currently from taxation is just. It would place all citizens upon an equal footing in so far as war conditions will permit. It would leave a country in far better position to make preparation for and to conduct future wars if they unhappily should come. The return to peaceful activities would be enormously simplified. Taxation would then be somewhat more burdensome than before the war, but the increase would be insignificant in comparison with that which must be borne if the borrowing policy is adopted. Moreover, the proceeds of the additional taxes would be used chiefly to relieve the families of those who were killed or the soldiers who were incapacitated during the war. The danger that class antagonism may develop even to the point of revolutionary outbreaks would be eliminated. Finally the taxation policy would leave a country in a vastly better position for further industrial development, to compete in the markets of the world and above all to take up its social and other civilizing activities more nearly where they were interrupted at the outbreak of hostilities.

LOANS AND TAXES IN WAR FINANCE—DISCUSSION

E. T. MILLER.—Two phases of Professor Sprague's very able paper invite discussion: the one involves the principles of money, the other the principles of public finance.

The relation of money and credit to prices, the relative importance of the money side and of the goods side in a period of price changes, the relation of particular prices to the price level, and what the constituents of the money side are—whether standard money or both standard money and credit money or all purchasing media—remain among the unsettled questions of money, though each one of us doubtless has rather positive convictions about them.

Professor Sprague takes the usual position of a quantity theorist with respect to most of these points. Subject to the qualification that the country is not nearing economic exhaustion, any considerable rise in the level of prices in a country engaged in war must be due, he thinks, to an increase in the volume of the purchasing media, and the medium most responsible for the rise in the price level is bank credit in the form of notes and deposits.

It is not my wish to direct undue attention to this phase of the paper, for clearly the main emphasis is upon taxation as a method of war finance. At the same time the avoidance of a rise in prices is one of the principal advantages claimed for taxation over borrowing, and so it is not altogether inappropriate to comment briefly on the theory found in the paper of price changes in a country engaged in war.

In the warring countries today the concern is not with that abstraction the level of prices, but it is with particular prices. The movements which engage attention are those of the prices of coal, gasoline, wheat, sugar, wool, cotton, leather, and many similar particular commodities of vital military and domestic consumption, and not the movements of an index number, which is probably a purposeless general purpose number, and includes whale oil and sassafras, crêpe de Chine and checkers.

The rises in the prices of these particular commodities are not, in my opinion, due principally to changes originating on the side of, or connected with, money and credit, but are to be attributed to changes in the relations between the demand for and supply of the goods themselves. To give an example, it is said that the English trench soldiers require a new woolen uniform every thirty days. This greatly multiplied demand, as compared with the peace demand, cannot be offset

by the decreased consumption of woollens by the nonbelligerents. No policy of excessive taxation, therefore, would prevent, we think, that rise of prices which is of most concern in time of war.

Preference for taxation over borrowing as a method of financing a war has received the endorsement of Hume, Adam Smith, Ricardo, Chalmers, and Mill, among the economists and among the statesmen. Gladstone was a distinguished advocate of it in the beginning of the Crimean War, although his advocacy was later in a much modified form. It has been called the English method, but improperly so, because it has never been thoroughly applied in England. As the sole method of financing a war it would be impossible, and before the gigantic expenditures of such a war as is now being waged the proceeds of a confiscatory policy such as is proposed by Professor Sprague would be a mere bagatelle.

In 1913 Dr. Helfferich estimated the national income of Germany at ten billion dollars. Some seven billions of this went to support the imperial, state, and local governments. Some six and a quarter billions was devoted to private consumption, and about two billions was added to the capital fund of the country. As a result of the war there has been an estimated decrease of three and a quarter billions, so that the present national income is only about six and two-thirds billion dollars, and this amount is to be compared with war expenditures at the rate of nearly eight billions a year. In France war costs are estimated at 62 per cent of pre-war national income, and in England they are placed at 49 per cent. In the light of these figures, extensive borrowing would seem to be inescapable. Borrowing in neutral markets as in the markets of allied countries would encourage inflation in those markets and so lead to a rise in prices, and especially would a rise occur when the proceeds of the loan were expended in the lending country's market. Prices in the borrowing country surely would move in sympathy with those in foreign markets.

Should borrowing in the domestic market be confined to preëxisting capital? And if it should, could it be so restricted? Professor Sprague thinks that it should and that it could. His reason why it should is fundamentally a moral one. He would confiscate through the tax agency all additions to income in excess not only of the pre-war amount but also of necessary consumption, and for the reason that it is unjust and inequitable that there should be conscription of person and not conscription of income. In this case the appeal to equity is something like the appeal to natural rights. It is a matter

largely of individual opinion, and while the proposal may seem equitable to some, it may not to others. When there is conscription of person, who are those who are left at home and what is their lot? Are they—the women and the children, the old, the infirm, and the weak—fit subjects for drastic taxation? Is not increased labor called for from all who are left behind, and are there not also added risks to those who engage in industry? A 100 per cent excess income tax would be unjust, and superimposed as it would have to be upon a tax system extended and raised for purely fiscal reasons, it might be so vexatious and depressing, in the case especially of a protracted war, as to weaken the motive to industry and defeat the main purpose of the financial program, which is to raise funds to carry on the war. Too drastic taxation, in other words, ignores what Professor H. C. Adams calls the “psychological factor” in raising public funds. Furthermore, the problem of assessing and collecting the taxes would be most difficult, and the example of practical socialization of moderate sized and large incomes in time of war would be a Banquo’s ghost in time of peace.

The reduction of unnecessary or wasteful consumption is one of the principal arguments for heavy war taxation. Such an argument is more applicable to some countries than to others. In only one of the present warring countries has there been extravagant or riotous consumption to be checked.

Though there is no feasible policy of taxation which can prevent entirely a rise of prices, and while borrowing in the domestic market is inescapable, a union of taxation and of borrowing is desirable, with taxation carried only to the point where it does not weaken the will to work.

H. L. Lutz.—We may readily agree with the central idea of Professor Sprague’s paper, namely, that the principle of “pay as you go” is a wise one to follow. In fact, we may go farther and say that this principle is deserving of much greater consideration than it is apparently receiving, in peace as well as in war. No principle of finance is being more widely or more flagrantly violated at the present time than that which requires a careful distinction between the purposes for which and the circumstances under which it is proper to borrow, and those which require the financing of the project under consideration by means of taxation.

Professor Sprague goes much farther than it has been customary to go, however, in his application of the idea that a larger part of the

cost of war should be met by taxation, in proposing that the entire income of the community above that required to sustain the accustomed standard of living be appropriated for public purposes. This he sustains on three grounds.

In the first place, it would be entirely equitable, he argues, to equalize in this manner the contributions made by different classes of citizens to the total cost of the war. The "stay-at-homes" are to be compelled to make a heavy contribution from their income to offset the sacrifice, or risk of life and strength, made by those who are drafted for the armies. Universal compulsory military service is to be equalized by a levy of universal compulsory financial contributions. The ethical question here raised I do not care to discuss, but I do not think that the two sacrifices are comparable. Those who go to the front are still making far the greater sacrifice, and even such a scheme of taxation as here proposed would fall far short of equalizing the real sacrifice involved in military service in war time. We need not hesitate over the plan, therefore, on such grounds as these.

Professor Sprague assigns as the second ground for his proposal the argument that loans could thereby be dispensed with, and thus the advance of prices that would almost inevitably accompany the use of the customary financial measures might be avoided. The check upon consumption would be exerted rather by taxation than by rising prices, and the government would gain from the substitution of compulsory financial support for the voluntary aid vouchsafed through subscriptions to public loans or the acceptance of paper money. This advantage would be achieved by appropriating all income in excess of that required to maintain the customary standard of life of the ante-bellum period, and all excess profits gained during the war.

With regard to these arguments, it should be noted in the first place that if prices should advance during the war it would be more difficult to maintain the customary standard of living, and therefore the tax program could not be made as drastic as that which would be possible on the assumption that prices would not be materially affected. The question of the course of prices during a war thus becomes important. Professor Sprague has stated that there could hardly be a marked advance in the general price level without the expansion of credits which would accompany a borrowing policy, with the implication that if borrowing were not resorted to there would be no material general price advance. This appears to emphasize excessively the monetary factors in the determination of price. It seems quite certain to the

present speaker that such a price advance might very well occur, indeed would almost certainly occur, even without an expansion of credits. The surrender by individuals of their purchasing power to the government, to be used for war purposes, would inevitably result in a wasting of resources, because the expenditure of this purchasing power would be absolutely unproductive. Professor Sprague has pointed out that a belligerent government is not deterred from purchasing by rising prices. So great is its necessity, in fact, that its use of materials must naturally outrun, during the war, the capacity of the country for replacement of the quantities consumed. This is the more true since the greatly increased government demand is accompanied by a heavy withdrawal of productive laborers from industry and a slackened rate of production of many necessary commodities. I am inclined to doubt, therefore, whether even the proposed program of war financing would result in preventing a general advance of prices, though I grant that this dislocation would probably not be as serious as if the other means of war financing were employed.

I have some question, too, of the fiscal adequacy of the plan as here proposed. If prices do remain stable, then incomes are not increased and the government's financial resource—the income of the community—does not enlarge, except through the appearance of excess profits made during the war. But without rising prices the excess profits will be smaller, if they appear at all. In order to yield sufficient revenue for modern war purposes, the government would almost certainly need to cut into the customary standard of life; and the addition of this proposal would, in my judgment, materially strengthen the plan from the fiscal standpoint.

The third ground for this proposal is that it would hasten the rehabilitation of the country after the conflict and permit a quicker readjustment to peace conditions and requirements, while it would diminish the handicap of a heavy war debt in preparing for possible future wars. This would doubtless be true, but against these advantages should be set the consideration, noted by Professor Sprague but not sufficiently emphasized, that the generation which is enduring the horrors of war might very possibly be more discontented, more difficult to unite in support of the national purposes, if it were asked to bear the whole financial burden, as well as the whole sacrifice of mental and physical agony. Much will depend upon the circumstances of the case. There is often a real justification for asking a future generation to bear a part of an extraordinary outlay, which is

being incurred as much for the sake of posterity as for those now living. Thus borrowing, if used with proper caution, might serve to unite and solidify the people in the prosecution of the war, and it might also open up a financial resource to the government which would outweigh that of excessively drastic taxation. In practice, some combination of loans and taxes will probably always be used in emergency financing, but—if I may close as I began—there is plenty of room, both in peace and in war-emergency financing, for renewed emphasis upon the greater proportion of the cost that should in any event be borne by taxation.

EDMOND E. LINCOLN.—While giving my qualified endorsement to the general scheme of taxing incomes to meet war expenditures, as outlined by Professor Sprague, I wish to emphasize a certain aspect of the matter which he has merely suggested rather than developed.

In determining what war costs a country, in a financial sense, it is highly important to consider how much capital has been destroyed, how the remaining capital has been invested, and how rapidly new capital will be created at the close of the abnormal period. Indeed, I believe that the crux of the whole question is, What has happened to the concrete apparatus of production?

Under the usual method of financing war by means of loans, whether by bonds or by the issue of an unusual amount of paper money, there result not merely the improvidence and wasteful expenditure referred to in the paper, but also a great deal of unwise investment, careless management, and in many cases a failure to keep the productive apparatus in good repair. This seems to be a very significant consideration, for there is a wide margin, in most cases, between the *economically desirable* and the *absolutely necessary* expenditures for maintenance and repair—not to mention needed improvements. Without going into details, the reasons for this harmful policy are probably two, *psychological* and *economic*. In the first place, driven on by the reckless spirit of the times, by the eagerness to reap huge profits with little effort, those in control of industry will put less into the upkeep of their plants and will conduct their business with an eye to the present rather than the future. Secondly, the added cost of material and labor will act as a further deterrent.

Under a properly devised income tax, granting for the moment its political expediency and fiscal adequacy, it seems probable that the productive apparatus would be kept in a better state of repair. Not

only would enterprisers be made to realize the gravity of the situation and the need for caution, but, moved by self-interest, they would doubtless make more ample provision for the upkeep of plant and would plan improvements for the future, realizing that otherwise the government would get most of their income, while it would be very difficult for them to recoup themselves at a later date. Though this policy, to be sure, might strike hard at the proposed plan as a means of raising revenue, such an objection is not necessarily conclusive, particularly when we give due weight to the fact that the economic motive involved would tend to shorten the duration of war. Furthermore, the savings of the people, however shrunken they may be, will be directed into channels ultimately more productive than could have been possible when everyone thought it his patriotic duty to invest in the government debt. And, finally, this *fiscally conservative*, though *politically radical*, method of financing would tend to steady prices, and so encourage still more the adequate maintenance of plant, and check speculation, not to mention other benefits gained.

Since, then, the scheme presented by Professor Sprague would seem to secure not merely the negative advantage of preventing luxurious consumption, but also the positive advantage of inducing a more conservative investment policy, as well as of promoting a higher conservation of the national productive apparatus and the national resources, its *desirability* is certainly established. Whether or not the canons of adequacy and expediency could be met is an open question.

T. K. URDAHL.—I have been greatly interested in Professor Sprague's accurate analysis of income and other taxes as a means of financing future wars. There is no criticism which can be made on his theoretical analysis. He is entirely right when he says that wars which are now financed largely by bond issues might, under ideal conditions, be equally well financed by direct and indirect taxation. If it had been possible to carry out such a scheme, it would probably have shortened many wars, and entirely prevented others. But there is no ministry in existence at the present time which would dare, under modern conditions, to take such a step. If they did attempt to finance by taxation, indirect taxes would probably have to bear an exceptionally large part of the burden.

As a matter of fact, Professor Sprague's theory is entirely contrary to the evolution of war finance during the past one hundred years. The tendency everywhere is to finance wars, to an increasing degree, by means of bonds, rather than taxes. The Napoleonic wars were fi-

nanced by England to the extent of 53 per cent by bonds, and 47 per cent by taxes, the Crimean War was financed 57 per cent by bond issues, and 43 per cent by taxes. The Boer War, 69 per cent by bond issues, and 31 per cent by taxes, and in the first two years of the World War, in spite of the most strenuous efforts, England succeeded in raising only 14 per cent of the cost of the war by taxation; the remaining 86 per cent was raised by war loans.

Furthermore, it appears as if Professor Sprague has neglected a very important element of modern war finance—that of fiscal or governmental monopolies. Never, in all the history of the world, has there been such a powerful socializing force as the present war. In no era have governments ever attempted to establish so many and so powerful governmental monopolies as have the warring nations of today. It is reported from English sources that over 45 per cent of the wage-working classes of Germany are now working directly for the government. It is also reported that over 2,500,000 English wage earners are directly employed by the English government in its varied governmental war establishments. England has taken over the entire railway systems of England and Ireland. Russia and France have also taken charge of, and are at present operating, the bulk of their railway mileage. War necessities have forced these countries to employ efficient men in this branch of their war service. Russia has hired one of America's best known railway presidents to take charge of and reorganize her railway business.

War necessities have also forced these nations to purchase and sell not only to their military branches, but to the people at large, great quantities of goods designed for human consumption. England last year established a commission to buy all the sugar needed by the English people; and this commission has sold sugar throughout England at an average price of about eight cents a pound. In the same way, France and Italy have established a fiscal sugar-selling monopoly.

Recently these three commissions of the three countries above mentioned have combined to purchase their supply of sugar through a common purchasing agent. This is but an illustration of the innumerable monopolies of the same kind now operated by the governments of Europe.

A fiscal monopoly does not necessarily mean monopoly to manufacture and distribute or sell the entire product. It may be a monopoly for manufacture alone, or it may be exclusively a selling monopoly.

New Zealand and the other Australasian English dominions have gone even farther and established government abattoirs, government

bakeshops, government mines, as well as governmental establishments for manufacturing all sorts of goods designed for military use.

It is probable, therefore, that in future wars, ministries will lay more stress on governmental monopolies than they have in the past, and that a very much larger part of the war's expense will be borne by governmental monopolies. In fact, it seems within the realm of possibility to assume that should another great war break out, one of the first things that the ministries involved will do will be to establish, on a very much larger scale than ever before, great governmental monopolies to carry on all kinds of enterprises which experience has demonstrated cannot readily be entrusted to competitive, privately-owned business. Such action will meet with less popular opposition than either direct or indirect taxes, since monopolies will be established, ostensibly, at least, to prevent rising prices as a result of war speculation in commodities needed by the masses. The large incidental revenue derived from them will not be generally regarded as burdensome and objectionable war taxes.

PROFESSOR SPRAGUE.—The possibility of financing war by taxes rather than by loans, and the advantages to be gained by the adoption of that policy, do not depend upon any particular assumptions regarding the relation between money and prices. It matters not whether a rise of prices is caused by an increase in the purchasing media of a country, whether the increase is a concomitant of the rise of prices, or whether the increase in the purchasing media is a result of rising prices. Heavy war taxes would tend directly to reduce the volume of the purchasing media, not merely because borrowing from the banks and investments by banks in connection with war loans would be reduced. At the same time, by checking individual consumption the taxes would also reduce the civilian demand for commodities and set free labor for the production of military supplies.

It has been suggested that the general price level has no particular significance, but rather the price of a narrow range of particular commodities, those of prime necessity for military purposes. To this I am inclined in large measure to agree; but if unnecessary consumption at the outset of hostilities is reduced to a minimum, adequate supplies of these necessary articles can be more readily provided. Take coal, for example; much coal in the various warring countries would have been saved if passenger traffic had been reduced to a minimum, to say nothing of its consumption in the production and transportation of unnecessary articles of individual consumption. Similarly in the case of

blankets and uniforms: nearly complete cessation of civilian purchases of clothes would unquestionably have contributed much labor for the production of adequate supplies of military clothing.

Whether the proposed rates of taxation would be sufficient to finance a war is indeed uncertain. Assuming no considerable advance in prices, a rate of 5 per cent on incomes of \$1500, rising rapidly with higher incomes, together with heavy taxes on a few commodities entering into general consumption, would, I believe, be sufficient. It is to be noted that the taxes would be levied on all incomes and not as at present on incomes in excess of certain definite amounts.

In conclusion, I may say that all those to whom I have outlined the matter have without exception admitted that conscription of income is a just complement of compulsory service. The requirements of modern warfare in more than one direction are beyond comparison greater than those in former wars. In this country at the present time the necessity of universal military service is being urged. If no league of nations for the enforcement of peace can be established, the policy of compulsory service would seem to be essential for national safety. The acceptance of this unwelcome measure by the mass of the people will, I believe, be hastened if it is accompanied by proposals for adequately and justly financing the costs of war.

THE PLACE WHICH ACCOUNTING SHOULD OCCUPY IN ANY SCHEME OF NATIONAL PREPAREDNESS

By JOHN RAYMOND WILDMAN
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Meaning of Economic Preparedness

Economic preparedness, I conceive to mean, that preparedness which will enable us to survive in a place among the leading nations of the world as a country filled with happy, prosperous people. The need for this preparedness is doubtless brought sharply to our attention by the present war in Europe. But that the matter is purely a war problem seems to me to be questionable.

Nature fitted us to take a foremost place among the nations of the world. Professor John C. Van Dyke, in his book entitled *The Money God*, presents this thought strikingly as follows:

Such a land! The sun never shone upon a fairer, a richer, a more productive one. By virtue of favorable climate and an abundant rainfall it has vast agricultural areas of almost unlimited resources. All kinds of produce may be grown. There are belts that yield cotton, cane, rice, wheat, corn, oats; there are meadows for grass, rye, and barley; uplands for fruits and vines, and wide plains for cattle, horses, and sheep. Out of the mountains come gold, silver, copper, iron; out of the valleys come coal and oil. For more than a hundred years there has been an uninterrupted cutting of the forests, still there is timber; and for a longer time a harrying of the fauna, still there is game. It has been, it is yet, a land of plenty, and all its paths have dropped fatness.

Whether as a nation we have used judiciously and conscientiously the fortune which nature and our forefathers bestowed upon us, seems at times doubtful. From the Phoenicians of Tyre by devious ways we inherited our over-seas commerce. While we were developing our natural resources we wasted, it is claimed, this precious heritage. There are those who accuse us of having been guilty of gross and careless waste in the development of our natural resources. The Forestry Department, for example, tells us that less than 50 per cent of the timber cut down is carried away or used. It is stated by the Department of Agriculture, *Bulletin* 309, that the growth of wood in the United States is being cut down at the rate of thirty-six cubic feet an acre every year, while the natural increase is at the rate of twelve cubic feet an acre. In other words, wood is being used three times as fast as it grows.

As a country, may we go on in this way ignoring our foreign trade

and wasting our natural resources? May we ignore the concentration of wealth and the demands of organized labor? Should we be allowed to forget that the once powerful Roman Empire declined and fell and that France from 1789 to 1795 was torn by revolution? If we could project ourselves into the future five hundred years, what would we read in the world's history concerning the United States of America? Should we not after the manner of Eastern civilization be meditative and from an economic point of view ask, "Whence did we come?" and "Whither are we going?"

We should look upon the present war, in my opinion, as an incident in our economic life rather than the controlling factor which will decide our ultimate economic fate. We must realize that the production of the future must be intensive rather than extensive. If we are to survive the fate which befell the Roman Empire, no matter how different may be the cause, industry must coöperate with the government under the leadership of the latter.

Definition of Accounting

Accounting may well be made an instrument for valuable service in bringing about national industrial organization and direction.

The function of accounting is to present comprehensive information concerning financial status and operations so that the information may be used as a basis for administration. Accounting provides for the analysis, classification, and correlation of financial facts relating to the past, from which may be formulated the policy of the future. As a striking example of this we have the progressive American manufacturer and trader, who is finding out how much of his present handsome profit is due to war business, new South American business, and domestic business, respectively. This information he will use to guide him in planning for the future.

Relation of Accounting to National Preparedness

That we are lacking in national financial facts is generally conceded by those who are in a position to know. The census bureau, notwithstanding the excellent work which has been done therein, is inadequate because of the infrequency with which financial data is collected and issued. Various bureaus of the Department of Commerce are collecting financial information, but each for some specific purpose, and apparently with considerable overlapping of effort, duplication of work, and annoyance to the respondents. There seems to be lack of system and organization in the collection of financial

data. There is no scheme for getting at one time all the financial information which the federal government desires.

There is need for more complete and comprehensive business information of a national character. The seller or buyer of a business which involves good will and who honestly attempts to value good will in a scientific manner is practically unable to do so. There is no place where he may go and ascertain the average return on investment in the field to which the business in question belongs, in order that he may capitalize the excess income in the valuation of the good will.

At the recent hearing of the Newlands Committee on Railroads, Mr. Alfred P. Thom, counsel of the Railway Executives' Advisory Committee, introduced testimony to the effect that the railway income of the country had declined from 7.09 per cent to 3.44 per cent during the period from 1910 to 1915. Whether or not this information was taken from the files of the Interstate Commerce Commission is not known. One thing, however, is certain, namely, that the commission was in a position to furnish such information. The importance of having it before attempting to fix rates is apparent. Yet in how many other industries could the same information be obtained?

One matter which is receiving unusual attention today is that of including in costs interest on owned capital. The most ardent advocate of the principle finds the practice difficult of accomplishment because of the question as to the rate to be used. Theory says, "That rate which represents the average return on capital invested in the line of business involved." Practice, not being able to obtain such figures, is forced to make use of various substitute rates, which are usually far from scientific.

There is no doubt that there is a woeful lack of system in recording, compiling, and correlating financial data on the part of great numbers of business organizations. The Federal Trade Commission some time ago sent to every manufacturer in the country a questionnaire and schedule asking for financial information. Only 30 per cent of the replies were in such a shape that they could be used, to say nothing of those who did not reply.

On the other hand there are many business concerns and institutions which have been greatly benefited by modern accounting. It has been a boon to big business. The trust movement in the United States began in 1898. During the three years which followed one hundred and fifty large combinations involving a capitalization of \$3,500,000,000 were formed. The knowing ones shook their heads and predicted failure. They had not reckoned with modern accounting, which made

it possible for the trust executive to transcend the limits of individual observation and get his visualization from a few eight and one-half by eleven sheets containing financial statements placed before him in the quiet of his luxurious office. When one of the big industrials takes over a new plant or business, the introduction of the holding company's standard accounting system is one of the first things to take place. When the vice-president in charge of production is about to decide whether to operate a certain mill on nothing but woolens or on mixed production, it is a statement produced by the accounting department which enables him to do so.

If accounting has been used to such advantage by the large industrial enterprises and a rapidly increasing number of municipalities, why should it not be made an instrument for service by the federal government? What has been done with the railroads and banks might be done, it seems, with all industries. In order to accomplish this, federal control over accounting would be necessary. There would need to be a government bureau to which every business organization, whether in legal type, sole proprietor, copartner, or corporation, would render financial reports. These reports might most satisfactorily take the form of a balance sheet and an income statement with the respective supporting schedules. Such statements if truthfully and completely made would supply the information from which could be compiled national financial figures of many kinds.

Objection to contributing information of so confidential a nature would be raised by many concerns. The soil pipe manufacturers, for example, might object to publicity regarding the return on investment in their line. If they did they would be old-fashioned. A new era seems to be dawning. Business men want facts. Many of them favor publicity. Just a few days ago the newspaper publishers ~~and~~ for an investigation into the cost of production of paper and proposed to make the Federal Trade Commission the "middleman" to supervise distribution of print paper at equitable prices. True, the manufacturers represent another phase of the situation, but it is probable that if the matter were submitted to them they would agree that they want a fair return on investment.

In the case of corporations transacting interstate business the Federal Trade Commission already has the power to require such financial statements. With intrastate corporations, which are relatively few in number, this jurisdiction is doubtful. So far as individuals and copartnerships engaged in interstate trade are concerned, there are those who think that the Federal Trade Commission has the necessary

power should it choose to use same. Whether or not the constitution renders individuals and copartners, whether engaged in interstate or intrastate trade, immune from the orders of the commission is questionable. This class would be the most difficult to swing into line, but the proper education of such persons and an appeal to their sense of national interest, namely, the sacrifice of classes to the good of the whole, might accomplish much. I have no desire to be prophetic, but something more elaborate than the report now required of the individual for income tax purposes is, I believe, going to be demanded by the government from the business man, even if the constitution has to be amended in order to get it.

What Federal Control of Accounting Would Accomplish

The advantages of the scheme for federal control over accounting which I have proposed appear to me to be manifold. It would give for the country as a whole the shares of distribution. It would show how the composite business man distributes his composite proceeds to the material and supply man, to the laborer, to the landlord, to the banker, and how much he retains as his share for profit. With this information the federal government would be enabled to legislate intelligently for capital as well as labor; to supervise distribution of commodities if necessary; to make laws for tariff purposes based as far as may be necessary on cost of production in this country; and to adjust equitably the tax on incomes.

The plan would further tend to create uniformity on the part of individual organizations in recording, compiling, and reporting financial data; to furnish accurate and reliable information from which to compile national statistics as to the financial status and operating strength of the various lines of industry, both singly and combined; proper apportionment of the economic forces during and after wars in other countries; effective organization and marshaling of the economic forces for wars in which this country may become involved; facts, not guess-work, as a basis for intelligent federal control and administration of business in the country in times of peace; and closer coöperation between the government and industry with the government leading the way.

SECURITY PRICES AND THE WAR

By ROGER W. BABSON

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As to the special problems likely to arise in the United States at the close of the European War with respect to security prices, I ask you to consider the following determining forces:

1. *The demand for securities*, which exists during periods of prosperity and which is especially potent in the early part of a period of prosperity. Such demand falls off as the period of prosperity develops.

2. *The supply of securities*, which accompanies a period of prosperity and which becomes especially great during the latter part of a period of prosperity.

3. *The attractiveness of securities*, from an investment point of view, depending both on the earnings of the corporations and the condition of the money market.

4. *The scale by which money is measured*;—that is, the abstract value of money—which depends largely, at the present time, on gold movements.

Of course there are other currents and cross-currents affecting the situation, but the allotted time will permit me to speak only of the above four. Moreover, for convenience I will subdivide this general subject of securities into three groups: namely, stocks, bonds, and commercial paper.

Stocks.—Statistics on bank clearings, new buildings, bank loans, foreign trade, railroad earnings, iron production, commodity prices, mercantile failures, and almost every other fundamental subject, clearly indicate that at the close of the European War we shall be at or near the close of the present period of prosperity. Therefore the *demand* for stocks should then be *less* than at the present time, and the *supply* of stocks should then be *greater* than is the case at present. This should especially be true of the stocks of new corporations which have been organized during the past three years, particularly those for handling war business.

As to the *attractiveness* of stocks from an investment point of view, after the war, opinions seem greatly to differ. Many honestly believe that the demand for steel, copper, and certain other raw materials will be even greater after the war than at present. I, however, do not hold this view. Personally, I believe that within twelve months

after the war there will be a decline of from 25 per cent to 50 per cent in the price of many commodities. History shows clearly that as soon as the price of a commodity declines buying at once falls off, and irrespective of current earnings of the company, prices for the company's securities decline likewise. People will not buy on declining markets, either commodities or stocks.

Gold movements do not have the marked effect on stock-market developments that is generally supposed. If the bringing of gold into the country inflates dividends, it likewise deflates the purchasing power of dividends. Therefore, inflation should directly make no difference in the selling price of the stocks. Indirectly, of course, the price of stocks is somewhat increased through gold inflation, as it is easier for speculators to borrow money during a period of heavy gold imports. If our gold movements after the war are as Mr. Roberts has so interestingly suggested, this should tend still further toward lower stock prices as peace is discounted.

Bonds.—The bond market after the war will be largely determined by what the foreign countries do concerning their present debt. If these nations default on these securities, or if Europe goes on a silver basis, then there will be an abnormal demand for the good bonds of neutral countries, especially bonds of corporations in the United States. In such a case, the prices of our good bonds should stiffen. If the war continues from two to three years longer, as some members of this Association insist, it is very possible that some of the nations will default on their securities, and certain countries go on a silver basis.

The most conservative bankers in New York assure me that the war will not continue any such length of time and that there will be no default of securities issued by the Allies. If this is so, there may be a tremendous demand for long-term money at the close of the war and fixed rates for long terms may rule about $5\frac{1}{2}$ per cent. This would mean that bonds of corporations in this country would sell on approximately the same basis. If so, our bonds certainly would not go up in price for some time. Statistics seem to indicate that this will be the case, if we consider only "demand and supply" and their attractiveness as an investment.

When considering the effect of inflation on the bond market, there can be no argument. Continued inflation results in higher interest rates; hence in lower prices for outstanding bonds. Unlike stocks, the interest rates for bonds, already outstanding, cannot be adjusted to the inflation of the monetary standard. On the other hand, if in-

flation means lower bond prices, the deflation which we hear is likely to come after the war should mean higher bond prices. Personally, however, I feel that the amount of gold that will be exported or imported during the next few years will not materially affect bond prices. The future of taxable bond prices depends on what Europe is to do with her debt after the war is over. Concerning this, nobody knows.

Commercial Paper.—Again, assuming that business will begin to wane after the war, the *demand* for commercial paper should then increase, owing to idle funds in the banks; but the *supply* of commercial paper should decrease, owing to slackness of business. Concerning the attractiveness of commercial paper after the war, I think there will be no material difference compared with its attractiveness today. Good commercial paper is always attractive; poor commercial paper is never attractive. The price of commercial paper after the war will depend on demand and supply. Considering only such demand and supply, it looks as if commercial paper rates—after the war—would be lower than they are at present.

When considering our other factor, gold movements, this bears a very important relationship to the prices of commercial paper. Commercial paper is used by the banks to take care of their excess reserves. Commercial paper is the great shock absorber of the banking system. Most banks use commercial paper as a reserve fund. Hence, when trouble comes, they expect their commercial paper to be paid first of all. This is absolutely true of country banks and to a great extent of city banks. The gold imports which we have had during the past two years have tended toward an excess of money, which has resulted in a great demand for commercial paper, and consequently rates have been low. If heavy gold exports continue after the war, they should reduce the loaning power of the banks and curtail their purchasing power of commercial paper.

The ultimate result of all this will be, in my opinion, that after the war, the decreased lending power of the banks, due to gold exports, will just about offset their excess money, due to general slackness of business. Hence, the keenest buyers of commercial paper feel that rates on A-1 commercial paper will be practically the same after the war as at present. Of course, there will be ups and downs, and poor names may sell with greater difficulty; but there should be no marked changes for good paper.

A study of statistics, therefore, leads to the following conclusions relative to what is likely to arise in the United States at the close of the European War with respect to security prices:

1. Domestic stocks are likely to sell at very much lower prices as peace is discounted.

2. Domestic long-term taxable bonds will sell at lower prices if the war stops at once, but perhaps at higher prices if the war continues two or three years longer.

3. Barring some catastrophe, such as the United States becoming involved, rates for standard domestic commercial paper should continue after the war on about the same basis as during the war, with of course the usual seasonal variations.

One other factor which should be mentioned is the non-taxable feature of certain securities such as the new farm-loan bonds which are about to be issued. Bonds and other securities which are free from taxation, both as to income and principal, will continue to be in demand after the war and continue to sell at high prices on a low basis due to their nontaxable feature.

PROBLEMS OF POPULATION AFTER THE WAR

BY JAMES A. FIELD

The University of Chicago

The prophet is proverbially without honor. Whatever hardship this may imply in other cases, in the case of the population prophet it is simple justice. Only too often has it been proven how fallible are predictions of future movements of population. In particular, he who forecasts the changes of population which are likely to follow the present war forecasts the consequences of causes at best obscure, operating under conditions which themselves remain profoundly in doubt. The suggestions of the following paragraphs, therefore, are not put forward as prophecies, but rather to indicate some of the possibilities which may have to be dealt with when the great conflict comes to an end and the processes of readjustment begin.

The direct effects of the war upon the populations of the belligerent nations are but too terribly apparent. Not only have deaths and incapacitating casualties run into the millions; not only is there this enormous loss of numbers: the wastage has been so concentrated among males of fighting age as to work a serious distortion of the population structure. Economically, the proportion of producers to consumers has been reduced. Biologically, the balance of the two sexes is disturbed in the reproductive years of life and the capacity of monogamic increase is correspondingly impaired. Even though birth-rates may nevertheless rally at the close of the struggle, this disproportion of ages and sexes cannot thereby be corrected. It will leave its disfiguring and disabling effects for decades to come.

Nor will the present population alone bear the scars. If there is any significance in heredity, and any truth in the contention that modern warfare accomplishes an adverse selection through the slaughter of the physically bravest and best, then the new generation and through it posterity must be the continuance of an impoverished breed. This, too, is a damage that mere volume of births can hardly mend. The two inches of average stature which the French people is said to have lost in the Napoleonic wars were lost in spite of a tolerably vigorous revival of the birth-rate after those devastating campaigns. And though we may question whether the selective agency of war operates with such obvious effect upon the human characteristics of body and mind that most concern us, we cannot well doubt that lasting modifications of our racial endowment are now in process on

the battlefields of Europe. It does not follow that deterioration will be at once manifest when the next generation succeeds to leadership in Western civilization. Indeed, it is more to be feared that civilization may conform itself imperceptibly to the lowered standards of a depleted stock. In any event, history that might have been is now cut off with the lives of those whose unborn descendants would have made it. Nor is the history of Europe alone involved. Civilization is hardly local nowadays; but if it were, the basis of the changed civilization would be brought to America by immigrants, through whom we shall probably be made to share, in our own flesh and blood, the racial calamity of what we have been pleased to call a foreign war.

With the return of peace we are likely to see the beginnings of new public policies with reference to problems of population. For this there is historical precedent as well as inherent probability. The wars of 1866-71, which left a unified German Empire confronting the shaken military power of France, thereby gave a special incentive to the fostering care of the population at home and abroad which has marked the state policy of imperial Germany; and at the same time they aroused that semi-official solicitude or even alarm with which the French have since regarded their dwindling birth-rate. The Malthusian doctrine, itself an indirect product of the French Revolution, and long a dominant influence in French economics, almost abruptly lost its vogue in France when first the menace of a united Germany and then the humiliation of actual defeat gave rise to the more militaristic views which characterize the French attitude on population today. More recently, the growth of the English eugenics movement following the Boer War has afforded a fresh reminder that population policies, like other national policies, are often tested by fighting.

In the past the concern of nations for questions of population has been based on a conviction that the balance of population is the balance of power. Superiority of numbers was of course not all: money was long ago recognized as the sinews of war. But it was felt that, given exuberant numbers, the requisite national wealth would be forthcoming. Even beggars, said one old writer, can be taxed. Doubtless, so long as the necessary equipment is available, the military importance of great numbers of men is hard to exaggerate. But the technique of modern warfare, exemplified especially by the unparalleled use of artillery and high explosives, demonstrates how little can be accomplished hereafter by men alone. War is more and more a supreme development of industry and finance. Nations which prepare for war

must shape their policies accordingly. Quite possibly the economic power to wage a successful war will not be found greatest where there has been the greatest increase of population.

At this point the program of military preparedness encounters the standard of living. We are familiar with the notion that a man's standard of living is defined by the wants he insists upon satisfying before he is willing to enlarge his family. If, now, he is compelled to make contributions to the state treasury for military purposes, this public demand upon him takes precedence over even the preferred items of his private wants, and tends by so much more to reduce that part of his resources which might be devoted to provision for children. No nation, therefore, that has to reckon with the voluntarily small family can expect to add indefinitely to the burdens of taxation without encountering a still further restriction of births. Efforts to achieve preponderance of armament and organization may threaten the loss of preponderance in men.

In war time admittedly standards of living change and their effects on the birth-rate are modified. Motives of patriotism lead to a cutting-down of the scale of personal expenditure, the more easily because at such times a universal rivalry in acts of patriotic devotion supplies an equivalent for the various emulative conventionalities of ordinary life. Moreover, by challenging the nation's power to survive, war seems characteristically to intensify the desire for children. Possibly a change of attitude is foreshadowed by the present revulsion of feeling against bearing children for slaughter. However, all these considerations are aspects of the psychology of war. They accompany phases of social life which are happily exceptional. It is in the longer intervals of peace, when standards of living operate more normally, that populations are replenished, war chests are filled, and the debts of old wars are paid off.

Aside from all questions of future military establishments it has yet to be seen if the stupendous war debts that are now rolling up can be carried and eventually repaid without serious disturbances of what has been the prevailing rate and manner of the increase of population. Because just now victory in the European conflict seems supremely desirable to the several belligerents, they have seen fit to levy the cost of their respective struggles for victory upon a subsequent generation. Thus the economic choices of Englishmen and Frenchmen and Germans for years to come will to an oppressive degree have been already exercised for them, vicariously, and through the bloodshot eyes of deadlocked combatants. This is the natural consequence of

deficit financiering in time of war. How disturbing may be the effects upon habits of consumption, and, through standards of living, upon population, can only be conjectured. This whole vague but momentous issue lends new interest to the question of how the burdens of war taxation are to be distributed in the coming years among the various economic and social classes.

The problem of the differential birth-rate, which the foregoing discussion suggests, is likely to assume a special importance in the United States, after the war. Our well-to-do and highly conventionalized classes are closely influenced in their manner of life by the ways of the corresponding classes abroad. If the war unsettles economic class distinctions in Europe, we may expect an indirect unsettlement here. But we have our own disturbances as well. The munitions contractor and the whole group which he typifies will confront us again with the familiar and troublesome social ferment of a *nouveau riche* class arising from the commerce of war time. So long as birth-rates are sensitive to emulative standards of living, the balance of increase among different classes will hardly pass unshaken through such an economic readjustment. We must prepare for a fresh crop of small families with large fortunes, and for a revival of restiveness on the part of those persons who see in that phenomenon disregard for an indispensable condition of national welfare.

In current discussion of population questions, and particularly questions of eugenics and birth-control, a most helpful part has been taken by women. To the intelligent woman the importance of such questions is self-evident. She looks upon them sanely, frankly, and earnestly. She finds herself less embarrassed by self-consciousness in such discussions than do most men, because she is more conscious of the race interests that are at stake. We could ill spare the counsel of women in such matters, or lose their leadership in attempts to reach public opinion and open the way for reforms. If a period of militaristic reaction should follow the war, with the effect of exaggerating masculine virtues and reducing the opportunities of influence permitted to women, progress in dealing with fundamental problems of population would be seriously set back.

Our national consciousness has been quickened by the events of the last two years. Possibly this may prove to be the most important result of the war, so far as our own special population policies are concerned. In the past, indeed, the inundating stream of immigration and the disproportionately high birth-rate among the foreign-born

have aroused a certain sense of national peril—a fear lest our democratic institutions should not endure if they were abandoned to a more and more alien citizenry. For the most part, however, the national motive has not been conspicuous among the active influences determining our increase as a people. Individual self-interest has been the chief counselor, though the dictates of self-interest do not always work out social welfare in the long run. On the other hand, the more recent eugenic ideal of race betterment is too abstract to appeal with practical force to the populace. If some definite and affirmative population policy had been associated in our minds with a sense of national loyalty and the effectual motive of patriotism, the response might have been more considerable, especially since the nation, unlike either the individual or the biological race, has power to support its constructive programs by legislation and the agencies of public administration. Unfortunately national interference in our population questions has heretofore been too typically negative: it has manifested itself in minor restrictions of immigration and in the enactment and sporadic enforcement of censorious blue laws designed to compel parenthood through ignorance. But a changed attitude may come with our new desire for a thoroughgoing national preparedness and with the awakening sense of our obligations as a nation in a world of nations. Precisely what form a national population policy might best take in this country remains problematical. Probably it would provide for the adequate segregation and care of hereditary defectives. Possibly it would include a system of maternity-benefits. Certainly it should recognize that parenthood is affected with a public interest, and that those parents who accept and perform their function with a due sense of its social responsibilities must in fairness be safeguarded and sustained in the performance by the community which is a beneficiary of their conduct. Such a program must necessarily grope its way slowly at first. Yet, if an enlightened spirit of nationalism shall but lead us to make a beginning, then at least one good thing will have come to us out of the war.

THE REDISTRIBUTION OF THE LABOR NOW EMPLOYED IN PRODUCING WAR SUPPLIES

By HAVILAND H. LUND

New York City

Your President not only honored me by inviting me to address your Association in annual convention, but he provided me with my introductory paragraph, which probably contains the meat of my address. In his letter of invitation he said:

It looks as though one of our acute problems would be the redistribution of the labor force now employed in producing supplies for the warring nations. Any opportunities that can be developed in the country districts will help solve that problem. Students are all agreed, I believe, that one of the important factors in solving a similar problem for us at the close of the American Civil War, when a couple of million men were turned loose from the armies to find remunerative employment, was the homestead laws of 1862 and 1864 making it easy for men to go onto the land. This absorbed a vast quantity of what would otherwise have been surplus labor. Unless we have some policy worked out, I think we are going to have some difficulty in absorbing the surplus labor force occasioned by the closing down of munition factories and other establishments that are supplying the warring nations. The politicians in Washington, I am afraid, will never solve the problem. There seems to be a disposition on their part to hide their heads in the sand and say that they do not see any problem.

Of course, a certain percentage of these munition workers will remain in the munition business to prepare our own defensives, but a properly organized campaign among these workers at the present time would result in a large percentage of them preparing to settle in rural communities after the war. The enormous cost of living, labor troubles, and the diminishing farm production all point to the settlement of our vacant acres as the only logical solution of this problem. The present imitation prosperity induced by the war has brought about unusual activity in land selling. The factories and munition camps are overrun with salesmen and literature. The only interest these men have is in getting the biggest possible cash payment on the land; leaving the man enough for his equipment and running expenses never enters into their calculation. You all know how this works out. Most of the purchasers lose their money; the state to which they migrate is the worse for their failure; and nobody wins but the land broker. Unless these selling agents can find their place in a sane plan for placing men upon the land, we shall find it cheaper to pension them and save the earnings of our working people. The interests of the banker, the railroad, the merchant, the land owner, and the man purchasing land are identical. Just one man must be put in his place or eliminated, and that man is the land broker. You are all aware

of the havoc he has wrought in the western states. At recent hearings held in San Francisco by the market commissioner it was demonstrated that no one is now making money by farming unless he purchased his land several years ago before it was priced so high. The report of these hearings should teach us a lesson. High-priced agricultural land means that farmers will fail and leave the state, with nothing good to say for it.

It is not impossible to standardize land selling. In all directions we are hearing how this, that, and the other thing should be investigated by a commission, and the amount of profit to be made by the men in that line of business indicated, if not controlled, by the commission's report. An editorial in *Collier's* of December 5 says: "If the distribution of food from those who grow and prepare it to those who use it is not a public utility, then there is no such thing." If the distribution of food is a public utility, how much more is the distribution of land, which is the basis of food production?

The Forward-to-the-Land League has been preaching for four years the necessity of standardizing land values, controlling the profit on land, and placing people in organized rural communities in groups of at least fifty families each, so that it will be a business proposition to furnish them those things necessary for their contentment, happiness, and prosperity. If the price of food is regulated, as well as light, heat, transportation, and other public utilities, why this reluctance to standardize and control that which is the basis of all our industrial fabric, namely, the price of agricultural land? How is it possible to bring food within the limits of reasonable price, unless the land itself is susceptible of the same regulation? It is really not as difficult as it would seem; it is chiefly a matter of arousing public opinion to the necessity of such control, and showing a plan by which control can be secured. No group of men in the United States has greater power in determining that this be done than you who are here assembled. Our progressive business men are more and more coming to see that they must consult with scientists before determining economic questions. One of the most valuable things that this Association can do, in my opinion, is to reach out a sympathetic, helping hand to the business men and make yourselves available to their commercial needs.

Only the most progressive in both classes yet see the necessity of working together. In the department of land alone, untold millions can be saved to our working people by protecting their home-purchasing power, through the creation of authoritative sources of land information, free from political or commercial control. Certain leading

Socialists do not think it wise to put colonization into government bureau control.

The next step is to prove to the landowner that it pays him to meet in counsel experts in rural economics, in the same way as the manufacturer calls in the chemist and engineer. Such coöperation will enable our people to move, in community groups, upon the vacant acres so greatly needing their labor. Business men are not accustomed to believe that a professor of rural economics knows more about agricultural settlement than the commercial colonization man. Is anything more important than for them to realize that he does? If the members of this organization will talk and write for their understanding, they will understand. The subject needs to be discussed in the vocabulary of the business man, not of the academic man.

What happens when working people invest the savings of a lifetime and lose them? Some of them commit suicide; some of them become discouraged and live on charity; all of them become bitter and discontented, and so the ranks of the socialists and anarchists are recruited. It is useless to argue against socialism; all the people know is that they suffer and are desperate; that there is no outlook for their children. They demand a change. But, gentlemen, the moment they possess deeds to their own homes there is no need of argument. The question settles itself automatically because hope is born again. You ask, "Will these people go into farm communities?" I answer from actual knowledge, "Yes, they will."

The Forward-to-the-Land League conducted a bureau of information in New York City during the past year, and night classes in agriculture and household economics were taught. These classes were conducted by the Extension Department of the State Agricultural College. Our lecturers said that they had larger and more enthusiastic audiences in our city classes than anywhere else. When you complain of the exodus from the rural districts to the city, remember these one-time farmers are still living in towns and in many instances they are the first who wish to return to the land. Their city experience, whether successful or unsuccessful, has enriched and broadened their minds. They know something of teamwork. They are accustomed to be a part of a whole, accustomed to work as a cog in a wheel under expert direction. Therefore it is easier to bring about coöperation among these prospective farmers than it is among those who remained at home. We have a registration card that is distributed among attendants of our classes and correspondents:

APPLICATION FOR FARM HOME

Surname_____	Christian name_____
Street and number_____	
City_____	State_____
Married or single_____	Education_____
Ages of all members of family_____	
Country of nativity_____	Did you farm there?_____
How many years in this country?_____	
In what state do you wish to farm?_____	
What kind of farming is preferred?_____	
What experience have you had in agriculture?_____	
Would you join a night class in agriculture?_____	
What is your religion?_____	
What amount of capital is available?_____	
Occupation?_____	

Seventy-five per cent of our city registration have had farm experience here or abroad. People coming to us personally assure us that they want to go upon the land, but that they do *not* wish to go to isolated farms. The immigrants, accustomed as they are abroad to living in rural communities and going out to their farms to work, do not take kindly to the American idea of farm life, and the poorest peasant who comes is as ambitious for his children as are you and I. They will put up with anything in the city rather than deprive their children of educational opportunities. But when these people hear of our plans for sending them out in groups of at least fifty families each, where there is a model rural school with vocational and social equipment, where there will be an agricultural instructor who can teach them the most scientific methods of production and attend to marketing their products in a wholesale business-like way, they, appreciating the value of this business organization because of their business experience, can clearly see that there is a chance for them to be both prosperous and happy, and to become the immediate possessors of homes, and they are keen for it. From publicity sent throughout the United States about this colonization work, one story has brought 700 letters. They came from practically every state in the Union, as well as from Canada, Nova Scotia, and Alaska, asking for the opportunity of moving into such colony groups.

You will next ask, "Why, if this is true, do they not go?" I answer that, with the present cost of living, it is impossible for the man who is earning even large wages to save sufficient capital to buy land and equipment and start himself on a farm. Their savings average from \$200 to \$2000. The bulk of them fall in between \$500 and \$600. It takes at least \$2000 to finance a small farm and we always allow \$2500. What chance has a man with this small capital to go out alone upon a farm and succeed? We have constantly discouraged the

man with small savings from buying land unless he could go out in such an organized community, so sure are we that he would lose his savings by so doing. Exceptional men succeed with small capital, but the average man fails. We have found that men are willing to go upon the land if the equipment is right. Therefore, it is a question of money and organization to bring about this distribution of labor in the rural districts. The recent credit bill passed does nothing for this class of people. It helps only the man who is fairly affluent. And it gives this man no advantage as to the amount of money he can borrow upon his land, for mortgage and life insurance companies have long lent as high as 50 per cent to 60 per cent on valuation, the only improvement being better terms as to time and interest. We must have a system of rural credits that will finance the tenant and the farm laborer, and the city man with small savings, before we can move any appreciable body of people.

What is the solution? You have probably heard many landowners and business men say that they are willing to extend enormous credit to the "right kind of people," but until the Forward-to-the-Land League worked out the plans for a bureau of information no machinery existed by which the right kind of man could be selected from the wrong kind and placed in touch with the credit opportunities. As the League is organized as a non-profit making association under state supervision and cannot buy or sell land, it inspires the confidence of the purchaser. It also creates a clearing house for the enormous amount of agricultural and home-welfare information, which the government has collected, but which is not generally available since the mass of people do not know that it exists. We try to show people value to the landowner and to the communities wanting to settle up their back country; and we try to show land values to the people wanting farms. We inspect soil, title, contracts, etc., before recommending land. Business men in a dozen different states have informed us that they are willing to extend from 75 per cent to 90 per cent credit to prospective farmers under our plan. They realize that an organized group with an expert director is a safe investment, when the individual family would not be. They realize that people farming and marketing under expert direction give the first and basic credit value; namely, rural organization.

Now that the Hollis Bill has been passed, the first question confronting farmers is the organization of the rural community. Organization must take place before they can avail themselves of the capital apportioned for this work; therefore, when we suggest taking

fifty families, the majority of whom have had farm experience and recognize the value of organization and coöperation, and start as an organized unit on farms that have been fully equipped by capital wanting to bring this people-value into the back country, we have brought into being that first requisite for credit, namely, organization before their settlement instead of after. Many people say, "You do too much for these people; you leave nothing for them to accomplish by their own initiative; they should begin at the bottom and work up." Yet these same people are striving for rural credit legislation that will enable a man somehow or somewhere to borrow money with which to purchase this equipment for his farm. Is it any different to turn the credit problem around, and say to the business men in the community where vacant land abounds, "Organize land and construction corporations, appoint a competent manager, each business man subscribe for as much stock—the profit being limited—as he feels able to carry to help bring about the scientific colonization in your county"? This divides the credit burden among those who are benefited by the people and agricultural increase which follow the equipping of this colony unit. We stipulate that each colony provide the following:

1. At least fifty farms fully equipped as to houses, barns, fences, wells, etc. Minimum of at least five acres per farm cleared. Agricultural implements, horse or mule, one cow, one dozen chickens, and two pigs on each farm.
2. An agricultural instructor and market expert.

Our bureau applicants move into these farms as an organized unit under contract to follow the instructions of the agricultural director until their debt is paid. It is thus possible to treat these fifty separate holdings as a business unit and market in carload lots. Loneliness and waste are eliminated.

Wherein does this differ essentially from trying to get legislation for personal credit that individuals may purchase their equipment? These colonists have only enough on the farm to begin. There is plenty of opportunity for initiative and leadership, and further organization. They have simply been furnished tools with which to begin farming. We do not expect carpenters or painters to go to work without tools, or to work half equipped until they have money enough to buy further equipment, nor do we expect people in the city to earn the money to establish their own schools and build moving-picture theatres. They are expected only to pay their share of the taxes or rent and the price of admission to the picture show. The model rural school should have moving-picture and lantern equipment.

It costs very little. Amusements patronized by the working class in the city are not expensive amusements. Railroads recognize these facts and are glad to share with landowners the extra expense of the vocational training and recreation in these rural communities.

It being true that the people wish to go to the land, and that the business men are willing to extend the credit by which they can go, are you asking why then has not the Forward-to-the-Land League established many such colonies? I answer, because the work is constantly interfered with. Whoever attempts to do a progressive thing in the industrial world, runs against vested interests. Shortsighted men feel that if they cannot make money in the way they have always made it they are out of the game; people refuse to readjust themselves to a better plan of people distribution as hand workers fought machinery. Our experience has been similar to that of a group of men who some years ago started a bureau of land information in one of our western states. The story was told me by one of the editors of the *Country Gentleman*. They were persecuted and finally prosecuted; a "frame up" case nearly landed them in the penitentiary. After their escape from this the legislature passed a bill shutting them out. Thus did the land speculator and the politician, who are usually one and the same, put an end to honest land information in that particular state. I have found that railroad presidents and higher officials are in favor of our plan. They invariably state that their colonization work has been for years expensive and ineffective, but with the exception of a few, the men at the head of the colonization departments have refused to coöperate, feeling that any plan that differed from their own must be wrong. These professional colonization men make me think of the old lady who was a "Sarah Gamp" in her neighborhood. The neighbors usually submitted to her ministrations when there was any sickness and she was terribly aggrieved when one of her friends summoned a trained nurse for her child who had diphtheria. The "Sarah Gamp" person felt much insulted and said, "Don't I know how to nurse children with diphtheria? Haven't I lost nine children from it?" Again we have certain commercial organizations and certain political organizations with more or less of a welfare program behind them who wish to conduct colonization or immigration departments, and who employ quite a number of people on generous salaries for this work. These are reluctant to give up their salaries and generally have not wished to coöperate in any plan which did not originate and center within their own organization. We in the Forward-to-the-Land League have wanted the coöperation of all now interested in the

work in the usual commercial or welfare channels. A rational plan of land selling does not necessarily mean the employment of fewer people. On the contrary it would make room for many more. It merely means a readjustment. It means making all of the work done by the state and federal government agencies, welfare organizations, commercial organizations, articulate, and places at the disposal of each the bureau of information which should be conducted in every principal city in the United States and Europe. Why should not the railroad colonization departments confine their work to helping organize better credit and marketing facilities on their roads?

An organization for people-getting should not be closely associated with railroads or land agents. It arouses suspicion. There is a prejudice against railroads among working people, and there is a justifiable prejudice against land agencies. For this reason every honest land dealer should be (and in most cases is) glad to help establish some source of authoritative land information that will put the hall-mark upon the honest land deal as against the dishonest.

The logical source of revenue for the conduct of these bureaus of information is yearly dues from commercial organizations and from the conduct of permanent land exhibits in our principal cities. Such land exhibits should be non-commercial in character, should show the agricultural products of every state, and be free to the public. We have written to the governors and agricultural colleges about this and have had a splendid response. It is not difficult to establish these permanent land exhibits, but again the commercial land man opposes us. He wants these short-lived land shows upon which he makes profit to continue their sporadic existence; and as our organization offers no great profit to anybody, nor political power, we have found it very difficult to secure the necessary finances for our work. It needs merely to be underwritten. It will be self-supporting when once it is going.

Our work has been before the public for the past four years. Portions of its program have been incorporated in the work of several organizations and different departments of government, but none of them has accomplished much, simply because the program is valuable only when it is used as a whole.

I realize that it is natural for every government department head to reach out for more money for his budget, which means more power and prestige and pleasure in the work; and university men in large numbers are advocating that the state and government take over colonization. Why are they less afraid of a bureaucracy here than in Germany or

Russia? Heredity monarchs created bureaucracies because bureaucracies are the logical machinery for the operation of autocratic power. In the United States we are watching the weird anomaly of a bureaucracy being built by radicals under the name of "government ownership." Many people are suffering from the hallucination that the people *are* the government. If human nature in its workaday needs could live up to its ideal, that would be true. But humanity is much the same throughout the centuries. Power begets thirst for more power, and tyranny takes possession in exact ratio to its opportunity. President Gompers said something like this in a recent number of the *Federationist*—"It is of the nature of the government to exercise power and to create more power and to extend the right of compulsion in order to make the activities of government more effective."

It is amazing that the unscrupulous politician has not long ago joined forces with the Socialist in his demand that the government conduct the business of the nation. These radicals, so deeply in earnest to secure the betterment of the people, will find government ownership a "wooden horse of Troy."

Better pause in this clamor for centralization and see whether our forefathers were not wise in distributing power into many self-governing groups. Friction? Yes. Delays? Yes, but also democracy. This friction under state rights and local government makes it impossible for one group to dominate everything. It is inevitable that one group will dominate each local center of government, inevitable that one man will dominate each group.

Recognizing that human nature after all determines the manner in which theories must work, and remembering that astute politicians, backed by selfish business interests, have in the past operated in both political parties for the perpetuation of their power, remembering how they simply played upon the jealousies of rival factions to keep their control, let us refrain from enlarging their opportunities. It is sad to watch the machinery of bureaucracy being lovingly and blindly built by the apostles of the greater freedom.

I confess that I am frightened at the present political outlook. Bills are up in several states and before the federal government providing for a government controlled colonization. Unless business men find a way quickly to grant adequate rural credit through channels of private enterprise, we shall find all this business centered in the government. Had I more faith in the politician than in the landowner and banker, could I believe that they will deal more fairly with the poor than will private enterprise, I too would shout for the government to

take over the whole system. The enthusiast demanding government ownership usually denounces the politician in the same breath. I ask who will administer all this new business for the government if not the politician? We shall surely need to breed a new type of politician if we are to get any result other than that now open to examination in the government service.

You will recall that some years ago the Department of Labor was permitted the use of the immigrant head tax. This privilege was so abused that Congress took the power from them and that money has gone on accumulating till it now amounts to about ten millions of dollars. Shall we put still greater opportunity for corruption in the way of the officials of that department? However trustworthy the present incumbents of office may be, how do they know that their successors will not be the same sort that abused the former trust?

To read the history of how the politicians managed land owned by the state of New York is illuminating. It illustrates the facility with which they can withhold such land from the use of those entitled to it. Is it not likely that the landlord will be appointed land commissioner? And is it likely that the landlord is unwilling to sell his land to the state (presumably at a fair profit) and then resell in the capacity of land commissioner (at a good salary) to the small purchaser? It should be remembered that for the government to handle land selling in our country differs in the nature of things from the problem presented by other governments. Our government is dual. We are getting badly mixed up over this once clearly defined duality. At present there are senseless duplications and consequent waste in many departments of the state and federal governments. Mr. Charles A. Stanton, president of the American Appraisement Association, explained very fully before the Fresno Chamber of Commerce recently why the Irish and Australian systems are not opportune for California. He said:

I cannot but feel amused when I find both the Irish Land bills and the Australian land system suggested at the same time as a model for colonization in California. The purposes of the two are so diametrically opposite that their application to our present colonization situation, as I look at it, would give us in the Australian system a system that is over a hundred years behind our times; and in the Irish bill would give us a system that is about two hundred and fifty years ahead of our times. If you will permit, I will try to show you how I draw my conclusions. The area of Australia is about equal to that of the United States, with a population of about 7,000,000 to compare with our population of 100,000,000. Under these circumstances, Australia is very much in the same position that the United States was in over a hundred years ago, and, while the United States, being primarily an immigration country, has very successfully managed to colonize her lands by private ventures, yet Australia, on account of her isolated position in the

world, finds herself confronted with colonization problems that are beyond the reach of private enterprises, especially as such a large percentage of her vast agricultural area is government land, which is far from the position of the United States today. Therefore, I claim that state colonization in Australia and the government aid extended in her rural credit system directed to help state colonization is an economic necessity for the colonization of her government lands. We might have used the Australian system to some advantage over a hundred years ago, but now, since all of the best of our government land has been taken up and our population continues to increase just the same, it is evident that we have passed the government colonization stage that is now confronting Australia.

In Ireland the situation is entirely different from Australia. There state colonization is a necessity due to her congested population and limited agricultural area. For the information of those not familiar with state colonization in Ireland, I wish to state that Ireland, with its area not exceeding that of Riverside and San Bernadino counties, with population equal to that of all the states west of Nebraska, has for centuries been burdened with large landed estates and absentee landlords. Considerable legislation, running over a period of fifty years, has culminated in what is now known as the "Irish Land Bill" by which the British government empowers a royal commission, known as the Estates Commissioners, to take over these large estates and colonize them. This royal commission, using the credit of the British government, and also appropriations from the British parliament, has full power to purchase at its own appraisal such lands as they deem suitable for colonization, have them improved, and have them sold without any cash down, under the amortization plan, extending payment over a period of fifty years or more. This bill has already involved the credit of the British government to the extent of \$700,000,000, which will be increased from time to time until all the lands are taken over, and which in all probability will remain a permanent debt against the people of Ireland. No other royal commission in the world has more power to use the credit of the government than that which has been granted to the Estates Commissioners under the Irish Land Bill of Great Britain. Do you think any such commission, with its unlimited land purchasing power, would be practical or even possible in the state of California?

Let us admit that state colonization in Ireland is an economic necessity and that we will adopt state colonization in California as soon as it becomes an economic necessity. In order to determine when this economic necessity will arise in California, we must proceed as follows: In sixty-seven years the state of California, approximately 100,000,000 acres in area, has developed itself from a wild, isolated, and unsettled territory to a prosperous state with a population of approximately 2,500,000 people, a growth that is unparalleled in the history of states and nations. California today has one person for every forty acres of land.

Ireland, with an approximate area of 21,000,000 acres, after having had many centuries for her growth and development, notwithstanding that she has supplied the world with 5,000,000 immigrants during the past fifty years, has a population of approximately 6,000,000 people. Ireland today has one person for every three and one half acres of land.

Mr. Stanton, from whom I have just quoted, believes in the principle of American colonization and is now organizing an appraisal corporation, known as the American Appraisement Association. The primary object of this appraisal corporation is to standardize our agricultural appraisal service. I believe this is an essential factor in the proper distribution of agricultural land. From his many years of appraisal work and colonization, he has evolved a scientific appraisal system based upon local agricultural statistics, which is prac-

tical in its application to all agricultural sections. His system has been approved by our best authorities and I suggest that you write him at 96 Broadway, New York, and secure his literature, which explains his system.

Two years ago I presented the plans of our League for credit and colonization to the officials of the Labor Department. They said at that time that they thought this work should all be done through that department, but finally agreed with us that it would be best to create a coördinating bureau in the Department of Labor and let that bureau articulate with the League's Bureau of Land Information, so that our bureau would be a thing apart from political control. At the invitation of the officials of the Labor Department a committee of five from our League was appointed to confer with the officials from the Agricultural and Labor departments and the Reclamation Service, with a view to close coöperation. The nature of this coöperation was defined in an official letter to us. We were granted two conferences of an hour and a half each, but later these officials decided that the government should go into the colonization business. They ignored, without explanation, their promise of coöperation with us, and later certain of these officials endorsed Congressman Crosser's colonization bill now before Congress.

I wish that all of you present would read this bill. With all Europe organized for concentrated effort, with centralized control, where shall we be in this country unless we too organize? We must if we are to meet their competition. Does this mean that we are to pattern our industrial organization after Germany as the Allies are doing? Shall we through private enterprise bring about the coöperation that is necessary to preserve our democracy, and yet meet competition on the only basis upon which it can be met? You in this organization have a big voice in determining our industrial future.

I have been in one of the large cities of the South for the past several weeks and my experience there is a concrete example of what must be met if we are to place any considerable number of people in farming communities. I first spoke at the board of trade; about twenty men were present; they thought the message of value, and called another meeting next day at which about eighty men were present. At this meeting a committee of fifteen was appointed. This committee endorsed the plans of the League and passed a resolution to raise \$250,000 for the first colony. Then the commercial colonization men, interested in stopping this movement, interfered with our work and nothing more was done for several months. I was obliged to leave the city and

when I returned later we had a mass meeting at which the mayor and prominent citizens spoke. We appealed to the churches and welfare organizations, women's clubs, commercial organizations, etc., and asked their coöperation in raising the necessary funds. Committees were appointed from all these organizations to coöperate with us. Many of the presidents of the religious organizations and clubs were willing to assist in the sale of stock. One of the railroads offered a large tract of land for colonization purposes, stating that it was willing to accept any price for the land which should be set by an appraisement committee to be selected by the representatives of these several organizations. And then the inevitable happened. A certain group of land men and commercial colonization men began to break up the work and succeeded in convincing the committee that it was unwise to go on with these plans. However, the railroad and many of the bankers and prominent people rallied to the League's standard and are determined to go ahead and create this colony. The great argument against the League's plan is that we have established no colonies. This makes about the fifth time that a colony was about ready and each and every time this same interference has made it impossible to go on. The only way that the program can be "put over," gentlemen, is by the rallying of those who are not interested commercially in the sale of land, or in the lending of money upon the land, to some one plan of action regarding the distribution of people, and thus of holding up our hands.

SOME PHASES OF THE MINIMUM WAGE QUESTION

By JAMES E. LE ROSSIGNOL

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In taking a bird's eye view of labor legislation since the beginning of the nineteenth century we see that for nearly a hundred years legislators confined themselves chiefly to the regulation of the age and sex of workers, hours of labor, hygiene of factories, and all the other environmental conditions of labor, but made practically no effort to regulate the value of labor, the center and heart of the labor contract.

It is often said that there is no essential difference between the regulation of conditions of employment and the fixing of wages. Mr. Webb says: "Once we begin to prescribe the minimum conditions under which an employer should be permitted to open a factory, there is no logical distinction to be drawn between the several clauses of the wage contract."¹ Professor Taussig appears to take much the same view, when he says: "The demand for legislation establishing a minimum rate of remuneration does not necessarily involve questions of principle different from those considered in the preceding sections; and yet, if pushed to its farthest consequences, it might easily raise a new question."²

However, the qualification made in the latter part of this statement, together with the discussion which follows, shows that Professor Taussig recognizes a distinction in principle between the two kinds of regulation. They are alike in many respects, though fundamentally different. In the one set of phenomena we have, as it were, regulations prescribing the quantity and quality of labor which may be bought and sold; in the other we have an effort to control demand and fix the market price. The former might be compared to the regulation of weights and measures, the grading of wheat and cotton, pure food laws, and other restrictions on freedom in production; the latter is like an attempt to fix prices of wheat and cotton, instead of leaving them to be adjusted by the deep-lying forces of supply and demand, or by the more superficial higgling of the market.

Not only is there this difference in principle between the two forms of regulation, but their effects are different in regard to the

¹ Sidney Webb. "The Economic Theory of a Legal Minimum Wage," *Journal of Political Economy*, Dec., 1912.

² Taussig, *Principles of Economics*, Vol. II, p. 299.

incidence of the burden, when there is a burden. In the case of burdensome regulation of the conditions of labor, there is an increase in the cost of production, and this burden, when the demand for the products of labor is more elastic than the supply of labor, tends to be shifted to the wage earners in the form of a deduction from wages rather than to the consumers in the form of higher prices. Under such circumstances the employers might retain nearly all of their employees, though at lower wages. If, however, the state or a labor union interpose with a minimum-wage regulation, the incidence of the burden is quite different. In that case the employers are prevented from "nibbling" at wages, and, if the burden cannot be borne by the employers nor shifted to the consumers, the employers have no recourse but to reduce production and dismiss some of their employees. In other words, in the case of regulation of environmental conditions, the sellers and buyers of labor can adjust wages according to the quantity and quality of labor offered, but when wages are fixed no such adjustment is possible, and a portion of the supply, usually of inferior grade, is not bought at all.

This is not to say, of course, that moderate regulation of both kinds might not be beneficial, but merely that the one kind of regulation, if carried to excess, would tend to reduce wages, while the other would tend rather to cause unemployment because of the very fact that high wages must be paid. The minimum wage, therefore, is not merely the latest of the long series of common rules, but it is, as Judge Cleeton says, a complementary measure designed to make the other rules effective.³ It is, in fact, the keystone and crown of the whole system; or, to use another analogy, it is a stopper intended to prevent wages in a regulated industry from falling to the level of wages in the unregulated industries round about.

Inasmuch, then, as the employers are prevented from nibbling at wages by the minimum wage rule, and debarred from economizing in other directions by rules controlling hours and other conditions of labor, they are forced to seek relief by closer attention to organization and labor-saving devices, and by requiring greater efficiency on the part of their employees, especially those receiving time wages. If this cannot be done, the employers' only recourse, unless they can bear the burden themselves, is to shift it to the consumers; and this, under conditions of elastic demand,

³ *Stettler vs. O'Hara, et al.*, Supreme Court of Oregon, Mar. 17, 1914, 139 Pac. 743.

must cause reduction of output and dismissal of employees. If, however, advances in wages invariably bring about a corresponding increase in efficiency, there is no burden to shift, and neither increase in prices nor reduction of profits nor dismissal of workers need take place.

The basic assumption of this reasoning is, of course, that there is in any industry a normal wage per unit of efficiency. This normal wage, as Pigou says, tends to be equal to the general level of efficiency wages, although in particular industries it may be temporarily above or below that level.⁴ The unit of efficiency most convenient for our purpose is the efficiency of the poorest laborer in a given group, the better laborers being supposed to receive the wages of the least efficient plus a supplement proportional to their excess of efficiency.⁵ At the point of equilibrium, the wage per unit of efficiency is determined, on the side of demand, by the present worth of the marginal product; and, on the side of supply, by what the marginal laborer must receive to induce him to remain in the group.⁶ The marginal employer, whether at the intensive or the extensive margin, is the least eager or no-profit employer; and the marginal laborer is the least eager or no-surplus laborer. Both are, as Clark puts it, at the margin of indifference, and the slightest change in wages would cause the one or the other to withdraw from the market.

Needless to say, actual wages are never exactly equal to theoretical or normal wages, and this fact has caused many to scoff at theories of wages, to regard the marginal employer as a myth, and to deny the utility of economic fictions. Wages, according to these skeptics, are not fixed by supply and demand, nor by competition among employers and employees, but by custom, tradition, caprice, monopoly, the avarice of the most heartless employer, or the poverty of the most necessitous worker. To take this view is to despair of any rational explanation of economic phenomena and to throw away the clew that might guide the perplexed investigator out of the maze.

Assuming, for theoretical purposes, a normal competitive wage in any group, and a certain elasticity of demand and supply, the conclusion is inevitable that if the wage be artificially raised in the slightest degree the demand for labor will fall off to some extent, and less labor will be employed. This is not to say that

⁴ Pigou, *Principles and Methods of Industrial Peace*, p. 60.

⁵ Moore, *Laws of Wages*, p. 78.

⁶ Taussig, *Principles of Economics*, Ch. 51.

in every case fewer laborers will be employed, for it is conceivable that the lessened amount of employment might be distributed among the same number of laborers, but in most cases some laborers will be dismissed. If all the laborers were of equal efficiency any one or more might be dismissed, but if they were unequal in efficiency the least efficient would be dismissed and the more efficient retained, assuming, for the present, that no change in efficiency took place. At the same time the supply of laborers willing to work at the higher wage would increase, but this would not affect the rate of wages except as it made the minimum hard to enforce.

Various complications are introduced into the calculation when we consider the extent to which wages are raised and the elasticity of supply and demand. If, for example, the minimum is fixed much above the normal, many laborers will be dismissed and many from other groups will be ready to take their places, this on the supposition that both demand and supply are quite elastic. If, however, the demand for labor is very inelastic, a great increase in wages may be made with very little displacement of labor. In such a case the total wages received by the laborers retained might be greater than the total received by all the laborers before the increase took place. There are industries, like the railway business, in which the demand for labor is very inelastic, and there are times in the history of most industries when there is a similar inelasticity of demand, as in agriculture in time of harvest, or in the manufacture of munitions in time of war.

It is not the purpose of the writer to discuss the innumerable combinations and complications due to varying elasticity of supply and demand for labor and the products of labor, variations in time and methods of payment, in efficiency of employers and employees, in the proportions of capital and labor in different industries—and all that—but merely to consider whether the effects of minimum wage legislation have been such as theory has led us to expect; and if not, to indicate what modifications in theory are necessary to make it agree with the facts. Indeed, the complications are so numerous that no merely theoretical discussion of the subject could possibly anticipate all the results. As Mr. Tawney puts it: "The ingenuity of employers and workpeople so greatly exceeds that of economists that discussions of what "must" happen, unsupported by evidence of what has happened or is happening, are usually quite worthless."⁷ Yet, if it is true that theory

⁷ Tawney, *Studies in the Minimum Wage*, No. 1, *Chain-Making*, p. 105.

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without experience is worthless, it is equally true that experience without theory is blind.

The experience of New Zealand and Australia is of especial importance, not only because it covers a period of about twenty years, but because it seems to foreshadow the experience through which the United States is likely to pass in the near future. In those countries there are two kinds of minimum wage, a very low statutory minimum, ranging from 2s. 6d. a week in Victoria to 5s. a week in Queensland and New Zealand, designed to prevent the employment of boys and girls as apprentices at little or no wages, and a comfort minimum or standard wage established in numerous trades by arbitration courts and wages boards.⁸ It is only the latter, of course, that is important for our present purpose.

When minimum wage legislation was first passed in New Zealand and Australia, both countries were suffering from a severe depression, during which there was much unemployment, and great distress, especially in the cities, where sweating appeared, a symptom of poverty which the colonies had hitherto scarcely known. Shortly after this a period of prosperity began which has continued with hardly a break until the present time. This extraordinary prosperity has doubtless been due chiefly to two causes: the process of refrigeration, and the rising prices of wool, mutton, and dairy produce.⁹ The value per head of New Zealand's exports in the year 1896 was £13 3s. 9d. (\$64); in the year 1913 it was £21 10s. 2d. (\$104);¹⁰ and Australia's exports show a similar increase. During this period the population of both countries increased considerably, but chiefly by the natural increase, as there was very little immigration. For the Commonwealth of Australia the excess of immigrants over emigrants was only 250,790, of which number 207,816 were added in the years 1911 to 1913; and in Victoria there was an excess of emigrants over immigrants of 60,929.¹¹ These facts, together with the remoteness of New Zealand and Australia from the rest of the world, and the influence of their protective tariffs, throw much light upon the success of minimum wage legislation in those countries.

A notable feature of Australian awards and determinations is

⁸ *Official Year Book of the Commonwealth of Australia*, No. 8, 1915, p. 914.
New Zealand Official Year Book, 1914, p. 710.

⁹ *New Zealand Official Year Book*, 1915, p. 393.

¹⁰ *Ibid.*, p. 355.

¹¹ *Official Year Book of Australia*, 1915, p. 101.

their moderation. Mr. Aves, comparing average wages of adult males in Victoria in 1900 and 1906, found that in 19 board trades after the determination the aggregate advance was 16.5 per cent on the combined averages; and in 12 non-board trades the aggregate advance was only 11.6 per cent. In regard to female workers the aggregate advance for 6 board trades was 10 per cent, as compared with 8.8 per cent in 12 non-board trades.¹² However, Mr. Collier, comparing average wages in 1900 and 1912, found that for the adult males the average increase had been somewhat greater in the board trades than in the non-board trades, but that the average increase in women's wages had been greater in the non-board trades.¹³ In certain exceptional cases large advances were made by the boards, but as a rule the advances have been very moderate and even conservative in view of the growing prosperity of Australia and the scarcity of labor. Indeed, the minimum wages awarded have frequently not kept pace with competitive wages, as in the case of the builders' laborers in Sydney, who complained that the minimum was largely inoperative, because fixed too low.¹⁴ Similarly, the Arbitration Court of New South Wales refused to fix wages in the boot trade at a higher rate than that fixed by the wages board in Victoria, because of the added burden which such a rate would place on local manufacturers.¹⁵ Mr. George S. Beebe, author of the Act of 1912, under which the New South Wales system now works, expresses the opinion that "much of the general advance in wages and of the general improvement in industrial conditions would have taken place if there had been no Arbitration Courts."¹⁶

Statistics of wages and prices throw some light on the effects of legal regulation, but, as Professor Hammond has well shown, they must be used with caution.¹⁷ According to the *New Zealand Year Book* of 1908, average wages increased from 1895 to 1907 by 23 per cent, while the price of food increased by 22.5 per

¹² Aves, *Report on the Wages Boards and Industrial Conciliation and Arbitration Acts of Australia and New Zealand*, p. 30.

¹³ P. S. Collier, "Minimum Wage Legislation in Australia," *New York State Factory Investigating Commission*, 1915, p. 1894.

¹⁴ F. A. A. Russell, "Industrial Arbitration in New South Wales," Paper read before Section F of the British Association, Sydney, 1914, *Economic Journal*, Sept., 1915.

¹⁵ *Official Year Book of Australia*, 1915, p. 899.

¹⁶ Geo. S. Beebe, "The Artificial Regulation of Wages in Australia," *Economic Journal*, Sept., 1915.

¹⁷ M. B. Hammond, "Wages Boards in Australia," *Quarterly Journal of Economics*, May, 1915.

cent.¹⁸ Later and more careful investigations show that prices of food and rent in Auckland, Wellington, and Dunedin increased on the average 16.5 per cent from 1895 to 1907, and by 24.1 per cent from 1895 to 1913,¹⁹ but no corresponding statistics of wages are available.

The following tables show the variations in nominal and effective wages in Australia from 1901 to 1914.²⁰

VARIATIONS IN NOMINAL WAGE INDEX NUMBERS IN DIFFERENT STATES,
1901 TO 1914

(Weighted Average Wage for Commonwealth in 1911 = 1000)

Particulars	1901	1906	1907	1908	1909	1910	1911	1912	1913	1914	Notes
New South Wales	858	886	910	913	942	968	1003	1058	1088	1096	{ Arb. Court establ. 1901 Wages Boards establ. 1908
Victoria	796	807	857	871	887	924	985	1038	1058	1065	{ Wages Boards, 1896
Queensland	901	909	914	925	946	960	997	1010	1027	1042	{ Industrial Boards, 1908
South Australia	819	832	858	868	905	951	1013	1048	1061	1062	{ Arb. Court, 1910
Western Australia	1052	1053	1053	1061	1068	1116	1152	1191	1214	1226	{ Arb. Court, 1912
Tasmania	719	749	725	725	732	772	799	934	1025	1028	{ Wages Boards, 1910
Commonwealth	848	866	893	900	923	955	1000	1051	1076	1085	{ Arb. Court, 1904

Note.—The figures in the above table are comparable both horizontally and vertically.

VARIATIONS IN EFFECTIVE WAGES IN EACH STATE AND COMMONWEALTH,
1901 TO 1914

Particulars	1901	1906	1907	1908	1909	1910	1911	1912	1913	1914
New South Wales	961	949	983	926	952	973	973	922	924	909
Victoria	915	919	979	941	980	981	1037	981	1007	964
Queensland	1172	1165	1151	1081	1112	1095	1090	1032	1060	1045
South Australia	948	934	960	911	914	943	957	906	947	929
Western Australia	1024	1029	1068	1060	1081	1091	1023	1032	1076	1073
Tasmania	827	833	818	788	769	812	838	896	976	943
Commonwealth	964	960	996	946	974	985	1000	955	975	952

Note.—Each of the years in which effective wages declined—1908, 1912 and 1914—were years of severe drought, when there was a rapid increase in cost of living.

¹⁸ *Year Book*, 1908, p. 539.

¹⁹ *Report of Commission on the Cost of Living in New Zealand*, 1912. *New Zealand Official Year Book*, 1915, p. 780.

²⁰ *Official Year Book of Australia*, 1915, pp. 1003-1011.

It is interesting to compare these figures with index numbers of real wages in the United States and England prepared by I. M. Rubinow and Frances Wood.

Year	Index of Real Wages in the United States ¹	Index of Real Wages in England ²
1901	96.8	100.9
1902	94.3	97.9
1903	97.3	96.3
1904	96.0	93.3
1905	98.6	92.5
1906	98.0	94.3
1907	97.7	94.3
1908	93.0	87.4
1909	89.4	87.0
1910	87.2	90.4
1911	88.9	94.3
1912	85.3	94.3
1913	85.3	
1914	84.3	
1915	85.3	

¹ I. M. Rubinow, "The Recent Trend of Real Wages," *The American Economic Review*, Dec., 1914. The figures for 1913-1915 were prepared by Professor Minnie T. England from the sources used by Dr. Rubinow.

² Frances Wood, *Journal of the Royal Statistical Society*, Vol. 72, p. 103; Vol. 77, p. 37.

In comparing these different sets of figures with one another, one is tempted to guess that legal regulation in Australia, although it has advanced real wages very little, if at all, has at least tended to make money wages keep pace with the rising cost of living; whereas in the United States and England they have lagged behind. This conclusion, however probable it may be, is far from certain, as one does not know how much weight to allow to the growth of Australian trade, the scarcity of labor, and other important factors in the situation.²¹

It is generally admitted that sweating has practically disappeared in Australia and New Zealand during the period of legal regulation, but this effect cannot be attributed solely to the work of the courts and boards. Industrial conditions were abnormal in the middle nineties, and, as prosperity came, sweating and other symptoms of poverty tended to disappear. But there is still much poverty, and a recrudescence of sweating and kindred evils might

²¹ A. C. Pigou, *Wealth and Welfare*, Part III, Chaps. 7, 12. "The Principle of the Minimum Wage," *Nineteenth Century*, March, 1913.

J. B. Clark, *Atlantic Monthly*, Sept., 1913.

be expected from time to time were it not for legal regulation. As late as the year 1908, which was a year of drought, it was found that in the workrooms in the Sidney district no less than 514 girls were in receipt of less than 4s. a week; but this was prohibited by the Minimum Wage Act of that year.²²

The fixing of minimum wages seems to have reduced the number of home workers in Victoria, at first. Hammond attributes this in part to the fact that piece-work rates were fixed on a basis higher than the time rates in factories.²³ The improvement of methods of production in factories has, of course, the same tendency. On the other hand, the fixing of high time rates for factories should encourage home work. According to the *New Zealand Year Book*, sweating has almost disappeared through the restriction of subcontracts.²⁴ Again, the number of outworkers—not necessarily sweated workers—has increased in Victoria in recent years.²⁵ This may have been due in part to the scarcity of factory workers, and in part to a stricter enforcement of the law providing for the registration of outworkers.

There is general agreement among investigators that more or less displacement of labor has frequently followed advances in wages, although not to the extent that had been expected, and in almost every case the decline was only temporary. Mr. Collier says: "After the period of adjustment, industry pursued its normal course. This is partially accounted for by the fact that the labor market, especially for skilled workers, has been quite active in recent years."²⁶

Numerous instances might be cited in confirmation of the foregoing statements. After the boot trade award of 1898 in Victoria, one manufacturer stated that he had dispensed with 70 or 80 hands out of a staff of 280, and others made similar complaints, and even the chief Factory Inspector admitted that the minimum had been placed too high.²⁷ A determination by the Hairdressing Board of Victoria had the effect of closing some of the smaller shops and throwing 70 men out of employment.²⁸ On

²² *Official Year Book of Australia*, 1915, p. 924.

²³ Hammond, "Wages Boards in Australia," *Quarterly Journal of Economics*, Vol. XIX, p. 569.

²⁴ *New Zealand Official Year Book*, 1914, p. 710.

²⁵ P. S. Collier, *Minimum Wage Legislation in Australasia*, p. 1877.

²⁶ Collier, *op. cit.*, p. 2243.

²⁷ Hammond, *op. cit.*, p. 585.

²⁸ *Ibid.*, p. 603.

the other hand, in certain trades, as baking and butchering, the determinations seem to have caused the multiplication of small shops employing no hired labor. In the furniture trade the determinations caused some substitution of Chinese for European workers, because they could not be enforced in Chinese shops. There was much unemployment in Victoria from 1898 to 1902, partly, if not chiefly, because of the drought, but a parliamentary Board of Inquiry in 1900 mentioned minimum wage legislation among the causes of the trouble.²⁹ After 1902 there was very little complaint on that score, for since that time Victoria and the commonwealth as a whole have had a practically unbroken career of prosperity.

It is the old and slow workers who have been the first to suffer displacement and the last to be reemployed, especially when wages were paid by time rather than by the piece. For their benefit a system of special permits has been devised, which, however, has not proved very satisfactory, either to the workers or to the employers. They tend, therefore, as Professor Hammond says, to drift out of the trade altogether to add to the number of unskilled workers, or to endeavor to carry on work in their own homes.³⁰

There is not much evidence at hand concerning the displacement of men by women, women by men, adults by young persons, or young persons by adults; but such as there is goes to confirm that theory that a high minimum for men tends to encourage the employment of women, while a high minimum for women favors the employment of men. Similarly, a high minimum for adults causes the employment of young persons, and these, again, are apt to be dismissed on reaching the age which would qualify them for the legal rate for adults.³¹ Again, the high wages awarded to relatively unskilled laborers have encouraged young men to enter those occupations; and, as Mr. Beebe says, the result has been a serious restriction in the production of new mechanics.³²

The statistics of unemployment in Australia throw little light on the effects of wage regulation, except as indicating that no serious results have followed. The following table gives the percentages of union members reported as unemployed at the end of each year.³³

²⁹ Collier, *op. cit.*, p. 1903.

³⁰ Hammond, *op. cit.*, p. 589.

³¹ Aves, *Report on Wages Boards and Industrial Conciliation and Arbitration Acts of Australia and New Zealand* (London, 1908), pp. 61, 177.

Hammond, *op. cit.*, pp. 591-594.

³² Geo. S. Beebe, *Economic Journal*, Sept., 1915.

³³ *Official Year Book of Australia*, 1915, p. 1000.

Year	Per cent of Union Membership Unemployed	Year	Per cent of Union Membership Unemployed
1891	9.3	1911	4.7
1896	10.8	1912	5.5
1901	6.6	1913	5.3
1906	6.7	1914	5.9
1907	5.7	1st Quarter	5.7
1908	6.0	2nd "	10.7
1909	5.8	3rd "	11.0
1910	5.6	4th "	

Another table gives the percentages of union members unemployed in the several states at the end of the years 1913 and 1914.³⁴

	Per cent of Union Members Unemployed at End of the Year	
	1913	1914
New South Wales	4.5	6.9
Victoria	5.8	14.1
Queensland	4.4	17.7
South Australia	8.7	13.8
Western Australia	4.7	8.6
Tasmania	4.9	18.3
Commonwealth	5.3	11.0

Without full knowledge of conditions in every state, one would be unwarranted in drawing any conclusions from these figures as to the effects of wage regulation, but it is worth noting that Tasmania, the latest state to establish wages boards, and the state in which wages have been advanced most in recent years, has suffered most from unemployment in the first months of the war.³⁵

The experience of Australia and New Zealand does not confirm the opinion that the fixing of minimum wages tends to increase the efficiency of labor. On the contrary, the general opinion is that efficiency has declined in recent years. The climate, the Australian temperament, the scarcity of labor, and the "go easy" policy of the unions might fully account for this, yet Mr. Beebe says: "I have been forced to the conclusion that our experiments have not added to efficiency, but have had a contrary effect,

³⁴ *Ibid.*, 1914, p. 991; 1915, p. 1001.

³⁵ *Cf. Collier, op. cit.*, pp. 2199, 2247.

mainly owing to fixing of standard wages instead of minima, and to the failure of our courts to popularize payment by results, with reasonable safeguards against sweating or undue speeding up."³⁶ Mr. Beebe further says, in discussing the general problems of regulation in New South Wales:

The conviction is growing, even in industrial circles, that we have nearly reached the limit of artificial regulation of wages, and that with the increased cost of commodities, traceable to higher wages, we are moving in a vicious circle. The worker begins to realize that while minimum wages and conditions are necessary and useful up to a certain point, they react and hamper enterprise when they go beyond the point of preventing men with limited capital from entering the field. . . . I think that the day is not far distant when we shall abandon our present elaborate system of compulsorily legalized contracts, and substitute in its place four enactments:

1. The appointment of a Board of Trade to prescribe a national minimum wage from time to time.
2. The fixing of a universal Eight Hour Day, with certain recognized exceptions.
3. The creation of a system for the apprenticeship and industrial education of boy labour.
4. A special Act relating to the hours of labour and minimum wages of females.

Subject to these regulations, I believe the old economic forces will again come into play, and that education, with the maintenance of easily accessible tribunals for arbitration, will lead to industrial peace far more rapidly than the compulsory laws with which we have been experimenting.

The experience of Great Britain in minimum wage legislation is even more important, from the American point of view, than that of Australia and New Zealand. Mr. Tawney's admirable studies of the chain-making and tailoring industries give more detailed information than any investigations of Australian conditions, but the general results, notwithstanding certain local variations, show a strong resemblance to those observed on the other side of the world.

The determinations of the Trade Board for the Chain-Making Trade went into effect in February and August, 1911, when the trade was recovering from one of its severe depressions. Since then, as Mr. Tawney says, the trade has experienced a period of quite unusual activity.³⁷

³⁶ Geo. S. Beebe, *Economic Journal*, Sept., 1915.

³⁷ R. H. Tawney, *Studies in the Minimum Wage*, No. 1, *Chain-Making* (London, 1914), p. 70.

The board fixed both minimum time rates and minimum piece rates. The minimum time rates were fixed at 2½d. per hour for hand-hammered chain, the women's section, and 5d. to 7d. per hour for dollied or tommied chain, the men's section. The increase in minimum piece rates varied from 9.9 per cent in one grade of chain to 68 per cent in another, the average of the median increases being 35.04 per cent.³⁸ Mr. Tawney states that both men and women have at certain times in the past been paid on a higher list than that fixed by the board.³⁹ There has evidently been a good deal of evasion of the determinations, and the increase in earnings appears to have been due as much to the increased volume of work as to the minimum rates. Weekly earnings have increased considerably, the mode for women being between 5s. and 7s. in 1913, as compared with 4s. and 5s. in 1910.

The poverty of the workers before the determinations must, one would think, have interfered seriously with their efficiency. As one worker said: "One cannot make chain on bread and tea." Still, the evidence seems to show that the laborers work more slowly when they are better paid, although they make a better quality of chain. There is no "speeding up," or other improvement in organization, as most of the work is done outside of factories, and machinery is little used.

In this trade wages form a large proportion of the cost of production. Prices have been raised from 23 per cent to 41 per cent, although the actual increase is not equal to this, as the quality has improved. The demand for chain has been so active that the manufacturers have had little trouble in shifting the burden to the consumers.

There has been no decrease in the number of workers. On the contrary, there has been more employment than at any previous time. The only people injured have been the middlemen, some of whom were parasitic subcontractors, whose work consisted chiefly in beating down wages. These have been largely eliminated, while the position of the useful shop-owners has been weakened.

The purpose of the determinations, however, was not to preserve the middlemen, but to raise the standard of life of the worst paid sections of workers. Mr. Tawney says: "What exactly the effect of the Trade Board will be in a time of bad trade, it is, as yet, too soon to determine."⁴⁰

³⁸ *Ibid.*, p. 74.

³⁹ Tawney, *op. cit.*, p. 65.

⁴⁰ Tawney, *op. cit.*, pp. 70, 104.

In the tailoring trade it was thought impracticable to fix minimum piece rates, so the Trade Board established a minimum time rate of $3\frac{1}{4}$ d. an hour for women workers and 6d. an hour for men, the rates to become obligatory in February, 1913.⁴¹ The minimum for men was too low to have much effect, except in certain places, as few men earned less than 6d. per hour. Very soon, too, the minimum ceased to be operative in the north of England, as in Leeds, where the growth of business caused the wages of women to rise to 4d. an hour, and the wages of men to $8\frac{1}{4}$ d., $8\frac{3}{4}$ d., and $9\frac{1}{4}$ d.⁴² One of the serious difficulties in the way of fixing minimum piece rates was that a piece rate which would assure workers in a good factory fair time wages would mean starvation wages to outworkers; while a rate sufficient for outworkers would discriminate against factory production.⁴³ Piece rates were frequently much higher in the south of England than in Yorkshire, although time wages were far lower. Mr. Tawney tells of some workers from Yorkshire who had visited an exhibition of sweated clothing held in London, and went home saying: "We wish we were paid the same price as sweated workers."⁴⁴

The minimum time rates, low as they were, would, if they had been strictly enforced, have provided an increase in wages to at least 38 per cent of the women piece-workers and about 25 per cent of the men workers in the branch of the industry affected by the determinations. Inasmuch, however, as there has been a good deal of evasion, it is impossible to determine accurately the extent of the improvement. Besides, there is no way of separating the results of the determinations from the influence of the unusual activity of trade.⁴⁵

In the tailoring trade wages form from a quarter to a third of the cost of producing clothing. The cost of materials is far more important, and the prices of these have been rising. An advance in wages, then, of 10 per cent, should involve an advance in the price of clothing of not more than $2\frac{1}{2}$ to $3\frac{1}{3}$ per cent.⁴⁶ However, there has been no appreciable rise in prices, although there

⁴¹ R. H. Tawney, *Minimum Rates in the Tailoring Industry. Studies in the Minimum Wage*, No. 2 (London, 1915), pp. 33, 64.

⁴² Tawney, *op. cit.*, p. 101.

⁴³ *Ibid.*, p. 199.

⁴⁴ *Ibid.*, pp. 135, 144.

⁴⁵ *Ibid.*, chaps. 3 and 8.

⁴⁶ *Ibid.*, p. 100.

has probably been some decline in quality, and there is no evidence that England's exports of clothing are falling off.⁴⁷

As in the chain-making business, the increased cost of doing business has been hard on the least efficient employers. "Some of the firms paying the lowest rates of wages have lost part of their trade, and some of the subcontractors have had their profits reduced."⁴⁸ There has been a tendency toward "speeding up," toward a more careful training of workers and improvement of processes and equipment.⁴⁹ In some cases this has gone so far as to put an undue strain upon the workers, who are threatened with dismissal if they do not earn the minimum. Mr. Tawney says: "So great are the opportunities for skilful organization offered by most modern machine industries, so much are they neglected when employers can pay any wage they please, and so potent are the effects of the erection of a standard to which they must conform, that the establishment of minimum rates has been followed, at least in the tailoring industry, by a general increase of efficiency both among workers and manufacturers."⁵⁰

In regard to the dismissal of workers the experience of Australia has been repeated in England. Certain workers have been dismissed, on the ground that they were not worth the minimum, but the number was not large and many of those at first dismissed regained work almost immediately.⁵¹ There has been some reduction in the number of home-workers, usually middle-aged or elderly women, of whom about two-thirds are married, one-tenth single and the rest widows.

As in Australia, the fixing of minimum wages tends to discourage the employment of adult apprentices, as they must receive the full minimum after twelve months' learnership. It tends also to discourage the employment of learners between fourteen and eighteen, as they must be paid minima varying with age and experience. The minimum, then, appears to discriminate chiefly against two classes of workers—the learners at one end of the age scale and the old and slow workers at the other. Those who are most protected, therefore, are those who are best able to take care of themselves.

As in the chain-making trade, the experiment in the tailoring

⁴⁷ *Ibid.*, p. 105.

⁴⁸ *Ibid.*, p. 254.

⁴⁹ *Ibid.*, p. 142.

⁵⁰ *Ibid.*, p. 160.

⁵¹ *Ibid.*, p. 254.

trade has been tried in a time of expanding demand and rising prices. Mr. Tawney says: "The clothing trade as a whole has been exceptionally active during the past twelve months, and its prosperity has not suffered from the establishment of minimum rates by the Trade Board. When trade begins to fall off there will, no doubt, be the usual growth of unemployment."⁵²

The experience of the United States in minimum wage legislation is of the first importance as a guide to future action, but it has been too recent to throw much light on the question.⁵³ Minimum wage laws have been passed in eleven states, but only Massachusetts, Oregon, and Washington have made any serious attempt to put the Victorian system into operation.⁵⁴

In Oregon, the minimum wages in retail stores were fixed at \$6 for girls under eighteen and inexperienced adult women, \$9.25 for experienced adult women in Portland, and \$8.25 for experienced adult women in other parts of the state. As a result of this the wages of a considerable number of adult women and of girls were raised to the minima, although average weekly wages in the 40 retail stores investigated increased but slightly—from \$9.92 to \$10.33—and the average weekly wages of adult experienced women increased still less—from \$11.62 to \$11.85.⁵⁵

During the same period—March and April, 1913, to March and April, 1914—the total number of adult inexperienced women employed in the 40 stores decreased about 21 per cent in actual numbers, but only 13 per cent in possible full-time numbers; and the number of adult experienced women decreased by about 10 per cent in actual and 9 per cent in equivalent full-time numbers; while the number of girls under eighteen increased by about 16 per cent in actual numbers and 15 per cent in possible full-time numbers.⁵⁶ It should be remembered, however, that Oregon, as well as the whole Pacific Coast, was suffering from a severe business depression in the year 1914. The fact that sales decreased by 8 per cent while the number of full-time workers of all classes decreased by 11 per cent, shows that there probably would have

⁵² *Ibid.*, p. 167.

⁵³ Report of Alexander J. Porter, Chairman Minimum Wage Commission. The National Civic Federation, Washington, 1916.

⁵⁴ "Minimum Wage Legislation in the United States and Foreign Countries." *Bulletin of the Bureau of Labor Statistics*, No. 167 (Washington, 1915), p. 31.

⁵⁵ "Effect of Minimum Wage Determinations in Oregon," *Bulletin of the Bureau of Labor Statistics*, No. 176 (Washington, 1915), pp. 18, 22.

⁵⁶ *Ibid.*, p. 37.

been much dismissal of workers without the minimum wage determinations.

While there was no marked displacement of women by men in the Portland stores, where business decreased the number of men decreased less than the number of women; and where business increased there was a greater increase among men than women.⁵⁷ There was also a tendency to employ girls under eighteen instead of adult inexperienced women, and girls of sixteen were preferred, as they might work for two years at \$6 a week. There was also some tendency for women to change their occupations after one year, in order to be classed as inexperienced workers for another year.⁵⁸

The employers as a whole do not seem to have had any serious complaint to make. They cut down their force more than the volume of their sales and retained their most efficient workers; and while they were obliged to raise the wages of some of their women workers, they seem to have made up for that by demanding more service of all. Their total labor cost increased on the average by only 3 mills per dollar of sales.⁵⁹

The experience of Washington has, apparently, been very similar to that of Oregon. Minimum wages have been fixed at \$9 for experienced women workers in laundries, telephone service, hotels, and restaurants at \$8.90 in manufactures, and \$10 in mercantile industries and general office occupations. There is a flat wage of \$6 for all minors, and a provision for apprenticeship licenses and licenses for defective or crippled workers, permitting them to work for less than the minima.⁶⁰

There has been some dismissal of inexperienced workers, but less than one would expect, considering the high rates and the depressed condition of business. Of course, the standard of wages is higher on the Pacific Coast than in the eastern states. Then, too, the Pacific states are similar to Australia and New Zealand in that they are remote from the great centers of population and lead an industrial life of their own, largely protected from outside competition. There are, in fact, two classes of industries: those which, like laundries and hotels, are effected slightly, if at all, by outside competition; and another class, like the manufac-

⁵⁷ *Ibid.*, pp. 12, 38.

⁵⁸ *Ibid.*, pp. 8, 16, 23, 40, 46.

⁵⁹ *Ibid.*, pp. 16, 68.

⁶⁰ State of Washington, *First Biennial Report of the Industrial Welfare Commission* (Olympia, 1915).

turing of clothing and candy, which come into direct competition with eastern products. Some of the latter class, as the commissioners state, "have had some difficulty in adjusting themselves to the new conditions. This situation is frankly admitted, and it will continue to exist until the sweat-shops of the East are compelled, through similar laws, to pay similar wages."⁶¹

The following statements are taken from letters which the writer has received from several of the leading merchants of Seattle.

Mr. S. Booth, superintendent of the Fraser-Paterson Co., says: "We believe we get more efficiency from the \$7.00 and \$8.00 girls after they have been raised to \$10.00. They seem happier, more interested, and, no doubt, are more ready to boost for their store. In other words, they are removed from the danger line of want, and the difference makes for happiness. We consider the minimum wage law an excellent thing for the employer, as all stores are placed on an equal footing, and the entire wage controversy is taken from the dominion of organized labor."

Mr. Geo. C. Pratt, store manager of the Bon Marché, says: "The increased wage is attracting a higher type of employee, which is demonstrated by the fact that the personnel of our store has shown a marked improvement during the past two years, thereby insuring us greater efficiency."

Mr. J. C. Black, of the Black Manufacturing Co., says: "The class of our labor is such that the minimum wage makes practically no difference with us at all. We do find, however, that it absolutely eliminates all chance of inefficient or semi-efficient girls getting permanently placed."

McCormack Bros. write: "One is apt to demand efficiency when paying the minimum scale and in this way get along with a little less of the cheap and less capable help."

Mr. J. S. Williams, of the Williams Garment Co., says: "The minimum-wage law has been a help to us, as we have been compelled to let out poor help because they cannot earn the minimum. We like the change, but it makes it hard on the woman who needs work, but cannot earn the wage."

Frederick & Nelson write: "We wish to state that after two years of operation, we have found the minimum wage to be entirely satisfactory. It has had no bearing on the number of people employed, and has increased the efficiency of those employed and those seeking employment to a great extent."

⁶¹ *First Biennial Report*, p. 14.

The experience of Massachusetts, when it has been thoroughly observed and analyzed, should throw more light on the minimum wage question from our point of view than that of any other state or country that has tried the experiment. Decrees have been made for the brush industry (1913), confectionery, and laundries (1914), retail stores, corset industry, and paper box industry (1915), and women's clothing industry (1916).⁶²

The decree for the brush-making industry, which became effective on August 15, 1914, fixed a minimum of 15½ cents an hour for all experienced females, whether adults or minors, and a rate for learners of 65 per cent of the minimum, the period of apprenticeship to be not over one year. Reports of the success of the regulation are very conflicting. The report of the commission states that the decree has worked fairly well, but admits that the industry suffered at first because of the disturbance created by the war and because of the failure of the European supply of bristles. When the supply of bristles had been restored, the general business depression injuriously affected the demand for brushes. However, the industry revived in the spring of 1915, and by June it had regained normal conditions. The increase in wages has been large; the capital invested and the value of the products have increased; the employment of women has not given way to that of men; nor has the minimum tended to become the maximum. From 1913 to 1915 there was no reduction in the number of female workers, but the number of male workers decreased from 472 to 417.⁶³

A pamphlet recently published by the Executive Committee of Merchants and Manufacturers of Massachusetts gives quite a different account of the effects of the decree on the brush industry. Mr. Lew C. Hill, President of the John L. Whiting-J. J. Adams Co., stated in January, 1916, that the number of women and minor workers employed by their firm declined from 397 in September, 1913, to 202 in September, 1915, and that there was also a decrease in men workers, involving a total loss in one week's wages of \$1237.76. Mr. Hill stated further that the manufacture of lowest-priced and many medium-priced brushes, which are the kind most largely used, had stopped in Massachusetts,

⁶² State of New York, *Third Report of the Factory Investigating Commission* (1914), p. 304.

⁶³ *Report of the Minimum Wage Commission*, Boston, 1916. "Effect of the Minimum Wage Decree on the Brush Industry in Massachusetts," *Bulletin* No. 7, Minimum Wage Commission (Boston, 1915).

and that they were now made elsewhere. He said that the demand for brushes had been enormous, because of the war, and that the manufacturers of Massachusetts could not compete with those of other states, because of the minimum wage. "The principle of obliging manufacturers to pay \$8.37 to workers of only \$5 or \$8 earning capacity has resulted in complete idleness for those who are prevented being paid what they can earn."⁶⁴

The committee who prepared this pamphlet claim that much unemployment has been caused by the decree of the commission relating to retail stores, amounting to as much as 10.7 per cent of the number of girls employed in the large department stores of Boston. Altogether, they claim that the minimum wage has had a bad effect on the industries to which it has been applied, and they desire to have it repealed, or, if there must be a minimum wage, that it be established for all the states by the federal government. Mr. Hill, on the other hand, would have the minimum wage law applied to three or more of the larger manufacturing industries employing women in Massachusetts, in order that practical knowledge of its effects might be obtained as soon as possible.

From the foregoing review of the effects of minimum wage legislation, especially in relation to unemployment, it is evident that it has seldom, if ever, had the disastrous results predicted by many business men and some economists. The anticipated results have occurred, but not in the degree expected. The cost of production has frequently risen, but not as much as the rise in wages. Marginal employers have suffered more or less, but other employers have been able to carry on business without much, if any, restriction in output or increase in prices. Some employees—at times a good many—have been dismissed, but after a while, as trade expanded, most of them have been reemployed, and no considerable residue of unemployables has been created.

In explanation of these facts one possibility is that actual wages do not equal theoretical, normal wages, but are usually below the normal, at least in a time of rising prices.⁶⁵ If this is true, as seems probable, there is some exploitation of labor when prices and profits increase but wages lag behind. As Taussig says: "Those business men gain most in periods of rising prices whose operations involve in largest degree the payment of

⁶⁴ *The Minimum Wage, a Failing Experiment*. Published by the Executive Committee of Merchants and Manufacturers of Massachusetts (Boston, 1916).

⁶⁵ Pigou, *Wealth and Welfare*, Part III, Ch. 2. Pigou, "The Principle of the Minimum Wage," *Nineteenth Century*, March, 1913.

wages."⁶⁶ In such a case the action of a labor union, in forcing wages up to the normal, might benefit the laborers directly concerned, by merely taking up the slack, without any reduction in the volume of business or any increase of prices to the consumers. Similarly, the action of the state, through wages boards or arbitration courts, might have the same effect. Here we have a substitute for unionism, the state acting as selling agent for labor, especially unorganized labor, and trying to sell that labor at its full market value. Of course, in a time of falling prices, actual wages might be considerably above the normal, and it might be necessary for the state to fix maximum instead of minimum wages. It may be such a consideration as this, among others, which led Mr. Gompers to say, in regard to the minimum wage proposal: "I fear the Greeks, even when they bring gifts."

Another explanation of the slight dismissal of workers following advances in wages may be found in the fact that the demand for labor is often quite inelastic. This may be due to inelasticity of demand for the products of labor, as in the case of coal and milk, or to inelasticity of the demand for labor itself, because of the necessities of the employers, as in the case of agricultural labor in time of harvest. In the former case any considerable advance in wages would probably be shifted to the consumers; in the latter case there might be no advance in prices, as all of the burden might be borne by the employer or shifted backward to the farmer and the landowner. In either case there might be a considerable increase in wages without much dismissal of labor, although in the long run the demand for labor might fall off, or expand more slowly than it should.

Closely connected with this explanation is the fact that minimum wage legislation in Australia and New Zealand has been tried in a time of expanding trade and rising prices, when the demand for labor was increasing more rapidly than the supply. Then, too, the advances in wages have usually been very moderate, and in some cases the current rates of wages have advanced beyond the minima granted by the boards and courts. Similarly, in the chain-making and tailoring industries of Great Britain, the success of the determinations has been largely due to the prosperity of these industries. The experiment in these countries has been tried under the most favorable circumstances, and it remains to be seen whether it will stand the test of a prolonged industrial depression or a time of falling prices.

⁶⁶ Taussig, *Principles of Economics*, Vol. I, p. 305.

Finally, it may be that the fixing of minimum wages has acted as a stimulus to both employers and employees in the direction of greater efficiency. When wages are advanced, as when the price of materials rises, the employer's burden is increased; and if he cannot shift it to his customers he is likely to demand more service of his employees, or to adopt labor-saving machinery, improvements in organization and discipline, and other devices for reducing cost. Mr. Webb says: "The enforcement of the Common Rule on all establishments concentrates the pressure of competition on the brains of the employers and keeps them always on the stretch."⁶⁷ Professor Pigou says: "In the last resort, however, mechanical analogies must give way to biological. For, an artificially increased wage rate may indirectly influence the quality and general efficiency of workpeople."⁶⁸ Mr. Tawney says: "Economic processes are not reducible to sums in simple arithmetic. The reaction which follows an increase or reduction in wages is not merely quantitative, but qualitative. Hence all forecasts are necessarily and invariably fallacious. The premises are not stable, they are modified by the consequences. There is more in the result than appears in the components, an unknown factor whose operation defies deductive reason. In warfare, to take an analogous case, that unknown factor which decides campaigns in defiance of military logic is the spirit of the army. In industry the unknown factor is the character of the workers and the character of the management."⁶⁹

This is the crux of the whole question. If the raising of current wages to some higher minimum produces a corresponding increase in efficiency, then, provided that the demand for labor is sufficiently elastic, there need be no dismissal of workers, as the amount paid per unit of efficiency is no greater than before, and may even be less. However, the evidence is by no means convincing on this point, but is rather conflicting. It is clear that the fixing of minimum wages causes the selection of the more efficient workers, but it is not so clear that it increases the efficiency of those previously inefficient. Those industries and those states in which a minimum has been established may obtain the pick of the workers, but the old and slow and otherwise subnormal workers may be as incapable as before, and their competition may lower the wage-

⁶⁷ Sidney Webb, "The Economic Theory of a Legal Minimum Wage," *Journal of Political Economy*, Dec., 1912.

⁶⁸ Pigou, *Principles and Methods of Industrial Peace*, p. 47.

⁶⁹ Tawney, *Minimum Rates in the Tailoring Industry*, p. 120.

level in unregulated industries and states. Only by fixing minima in all industries and in all parts of the country could the effects on efficiency be brought to light. On general principles one would think that a scale of wages based on units of efficiency running from some low to some high point, with suitable provision for promotion, would do more to encourage efficiency than a high minimum offering the simple alternative of wages or no wages.

The employers, too, in these times of progress and keen competition, are already under a heavy strain, and it is a question whether a new stimulus will goad them to further effort or force them out of the game. As Taussig says: "The proposition that heavier burdens necessarily develop greater strength is highly disputable."⁷⁰ At any rate, the marginal employer, as all admit, is unable to keep up the pace, and business tends to be concentrated in the hands of the more efficient firms. This shows that the increase in the workers' efficiency is frequently not equal to their increase in wages, and that the added burden, when it is not shifted to the consumers, falls on the more efficient employers, since they alone survive. This is not to say that the more efficient employers will pay the workers more than they are worth, but only that they will make less profit than they did before.

While the minimum wage has not produced in any country the disastrous consequences predicted on merely theoretical grounds, there can be no doubt, in view of all the evidence, that in itself, other things being equal, it does tend to limit marginal applications of labor and to cause the dismissal of the least efficient workers, and that the higher the minimum is fixed the stronger does this tendency become. The fact that other things are not equal, and that some beneficial tendencies may be set in operation by the minimum wage, does not wholly counteract its dangerous tendency, which, under less favorable conditions, might do more harm than good to the very persons who most need its help.

Probably the best result of the minimum wage movement is that it has called the attention of all concerned to the need of efficiency on the part of both employers and employees, and on the best methods of improvement in this respect. Whether we like it or not, employers pay wages not according to need but according to service, and if the demand for labor is to go on increasing, there must be a minimum of service rendered for a minimum wage. The

⁷⁰ Taussig, "Minimum Wages for Women," *Quarterly Journal of Economics*, May, 1916.

present situation calls for something more than a crude minimum wage for all workers of a certain age and experience; it calls for some sort of apprenticeship, for vocational training, for classification of workers, for remuneration according to service, for a proper system of promotion, and for a greater degree of security and permanence in employment. Whether all this will come about through the efforts of the parties directly concerned or by the agency of the state the future will show; but if the minimum wage movement had done no more than call attention to these needs it would not have been in vain.

It is common to decry the mediaeval regulation of wages in England under the Statutes of Laborers and similar laws, but there is good reason to think, with Mr. Lipson, that this maximum wage legislation served in some degree to check the rise in wages and to repress the aspirations of the working class.⁷¹ If, therefore, the state, supported by a tacit or confessed conspiracy of the employing class, could keep wages down; it may be inferred, with some show of reason, that a state friendly to the wage-earners and supported by organized labor, could do something in the way of reinforcing the bargaining power of labor and pushing wages up. There are limits to the power of the state in both directions, and dangerous pitfalls on every side; but if voluntary effort on the part of employers and employees cannot solve the wages question, the state should try to do it, that all normal workers may receive at least a living wage, and all employers a minimum of service which will be worth that wage.

⁷¹ E. Lipson, *The Economic History of England* (London, 1915), pp. 93, 348 *seq.*

SOME PHASES OF THE MINIMUM WAGE—DISCUSSION

A. B. WOLFE.—Professor Le Rossignol comes to a reasonable and satisfactory conclusion with regard to the duty of society persistently to experiment with minimum wage legislation. His conclusion is based partly upon theoretical considerations, partly upon an admirable analysis of the actual working of minimum wage systems. I think, however, that we can not as yet place any great weight on experience. The area of experiment and the period of our experience are both too small to afford ground at all certain for inductive judgment as to the long run and permanent effectiveness of such laws. The idea can not be given a fair try-out by piecemeal legislation or by temporizing wage-boards arriving at compromise awards, but neither will the problem approach solution if left to a neo-classical theory which in effect perpetuates the old *laissez-faire*, do-nothing negativism. If experience is as yet an unsafe guide, and if consequently we have to supplement it by an appeal to deductive analysis, we must in so doing strive to be thoroughly critical of our premises as well as of our logical processes. Nor will cold logic alone get us anywhere. Economists have made no greater mistake than to accept the idea that economic analysis and ethical idealism are to be rigidly divorced. Professor LeRossignol says, as many have said before him, that employers pay on a basis of product, not of needs. It has become a theoretical convention to assume that we can not go beyond this seemingly adamant fact. But after all, the impulse behind economics today is an ethical motive. The problem of wages, and of minimum wages in particular, comes down to the question, Are we, everybody, as consumers going to be willing to pay our way; and if so, can a way be found by which we shall have to pay it, despite our natural propensity to accept a good or a service at a low price because "it gives employment to the poor"? By a little more attention to "needs" and a little less to hypothetical marginal products it is perhaps possible that we might not only arrive at a truer theory of distribution in general than we have yet attained, but that we might also throw needed light on the natural limits to the effectiveness of minimum wage legislation.

The conception of what Professor Le Rossignol calls the normal wage, as well as practically all our analysis of general wages, proceeds upon the assumption of a fixed minimum below which the interest rate and the general level of profits can not fall, without reducing the amount of capital and discouraging business activity. This

is the fundamental objection which Taussig and others raise to minimum wage legislation; and this is the crux of the theory of the dynamics of wages.

The controversy over minimum wage legislation is essentially the same as that between Longe, Thornton, J. S. Mill, and Cairnes fifty or sixty years ago over the validity of the wage-fund doctrine. The real point was then, as it is now, the question of the elasticity or inelasticity of the amount of the total product which labor can secure as wages.

Specifically, the argument is that minimum wage laws can not in the long run accomplish a living wage if employers can not afford to pay it, and that they can not afford to pay it if, after paying interest and rental charges and allowing themselves a fair rate of profit, there is not enough left over for a living wage. The residual theory of distribution was long ago thrown out of the door, but it is now climbing in again through the back window.

Personally, I am unable to subscribe to any residual theory, or to the idea that the supply of any productive factor, whether capital, management, or labor, rests upon such motives that the general reward given to it at the present necessarily represents the minimum necessary to its continued maintenance. That the rewards of capitalists and entrepreneurs are so low that an increase of all wages to a decent standard-of-living level will impair savings and discourage business is largely an assumption. As a fact it has not been established.

In the first place, in estimating the minimum necessary to give a fair return on investment, little attention is given to the amount of *actual* investment as against overcapitalization. It is easy for a concern to cry out the impossibility of paying a living wage when it is trying to pay dividends on stock which is 50 per cent pure water. It would be exceedingly enlightening could we know the actual money investment represented by American industries, large and small, and compare it with the paper capitalization upon which dividends are being paid.

In the second place, and most fundamental of all, is the *probability* that the interest rate can be lowered greatly without seriously impairing the amount of savings. We need not subscribe to Clark's contention that lowering the interest rate will increase saving.¹ That seems more than doubtful. Taussig, on the other hand, argues that because the interest rate has been fairly constant since the middle of the eighteenth century, "it is perhaps not an unjustified inference that

¹ *Essentials of Economic Theory*, pp. 339 ff.

there is a large volume of savings at the margin." He admits that the rate in the future is likely to be affected by the very fact of large accumulation, but thinks the experience of the last few generations indicates that the rate will not sink below about 2 per cent.²

This argument from experience is inadequate and unconvincing. It does not take sufficient account of the fact that the last 150 years have been a period of marvelous industrial and territorial expansion, and that only this expansion, world-wide in extent, has kept the demand for capital up to a point which could maintain the interest rate at 2 or 3 per cent in the face of unparalleled increase in savings. Even so, it may not be amiss to point out how strenuous have been the efforts of investors to find outlet for their surplus funds in foreign countries, efforts which certainly played no secondary rôle in the causation of the present world war.

Moreover, there is insufficient consideration of the influence of the concentration of wealth, and the fact that ever larger and larger amounts are saved and seek investment simply because their owners do not know what else to do with them. Nor is account taken of the possible influence of the psychology of habit. It is almost second nature with the business man, and with many others, to save, and we have no evidence which accurately measures the effect of changes in the interest rate on his saving. There *may* be a large volume of savings on the margin, but the volume of intramarginal saving, and the amount of savers' surplus, must be incomparably larger. It is at least possible that by lowering the interest rate, and paying higher wages, we may slice off for society a considerable part of the immense lump of savers' surplus, and at the same time secure addition to savings from workingmen's families now too poor to save without materially reducing the total amount of savings. The idea that the interest rate can not be lowered without reducing capital-equipment and therefore lowering the demand for labor, needs a critical re-analysis. For the great bulk of savings, it is probable that the supply curve would show great elasticity, and consequently that a material lowering of the interest rate may take place without cutting off more than a negligible quantity of capital.

Turning now to labor supply, the idea that standard minimum wages would stimulate further overgrowth of population is not well founded. One way to reduce the birth rate is to raise the standard of living, and the only way to do that is to raise wages. Taussig, urging on the one hand the "numbers" objection, implies that the

² *Principles*, Vol. II, pp. 26, 27.

minimum for women should not be based on what it costs a woman to live alone, in lodgings, but what it costs a girl to live at home with her parents.³ But if you wish to reduce the marriage rate, give young women economic independence, so that they will not be tempted to marry simply to escape long hours of hard work at low pay, which has to be turned into the family coffers. Humanitarian consideration aside, the strongest argument for minimum wage legislation for women, is that it will help them toward economic independence, and be one element in the reduction of the birth rate.

The general toning up of industry that would result from universal minimum wage legislation would be noteworthy. If the inefficient entrepreneurs would be eliminated so would the ineffective workers. I am not disposed to waste much sympathy upon either class. The elimination of the inefficient is in line with our traditional emphasis on free competition, and also with the spirit and trend of modern social economics. There is no panacea that can "save" the incompetents except at the expense of the normal people. They are a burden on society and on the producers wherever they are. The real question is whether the inefficient are less burden if we permit them to be employed at low wages and thus tend to fix the wages of the normal workers at the same low level, or whether they would be less burden if we definitely prohibit the employment in industry of any person who can not earn a standard wage, and set such persons aside for special treatment, much as we do backward children and subnormals in the schools.⁴

It is unfair to consider minimum wage legislation as the only line of economic advance. Naturally, it is not a cure-all. Other lines of reform, as Professor LeRossignol has indicated, must go with it—vocational education, restriction of immigration, birth control, segregation of the unemployable. It may be argued that if these were put into operation minimum wage laws would be unnecessary, but the point is that minimum wage standards may do much to render other lines of advance effective. It is sheer short-sightedness to condemn the notion of a "national minimum," simply because it alone cannot be effective in raising the wages of all possible workers. Recognizing that there are limits to productive power and to what we can reasonably demand of life, we should nevertheless see that the conditions

³ "Minimum Wages for Women," *Quarterly Journal of Economics*, May, 1916, pp. 417, 418.

⁴ Cf. Sidney Webb, "The Economic Theory of the Minimum Wage," *Journal of Political Economy*, Dec., 1912.

under which a given piece of legislation has to operate are quite as important as the nature of the legislation itself. If universal minimum wage legislation, effectively enforced, should prove the existence of a labor supply greater than existing capital and natural resources can employ at a living wage, then there would be no other remedy than to reduce the labor supply. But until we put such legislation into operation in all the states, we can not know that the real reason for low wages is a redundant labor supply, and not merely traditional and conventional standards as to what constitutes a fair rate of interest and profit.

If industry, when the disturbing elements of change in our highly dynamic era are somewhat subsided, cannot support its workers at a decent standard of living, one which will keep a real soul and a healthy body together for the normal span of human life, and one which will afford an education somewhere nearly sufficient for the development of real citizens for a real democracy, then it stands condemned at the bar of ethics, for in spite of all the material advance we have made, we shall have demonstrated our failure to bring a certain and lasting improvement in the life of the masses, and to found a political and social democracy upon a vast, but hollow, material productive capacity.

ROBERT L. HALE.—In discussing the question of wages regulated by law, we are often brought to face the question, already suggested by one of the speakers this morning, of what we are going to do in case the workmen refuse to obey an adverse ruling. Are we going to force them to continue working against their wills? Is not such compulsory work slavery? The question seems to imply a general principle which many of us have in the backs of our minds and which may as well be brought out into the open—a principle, namely, that there is some sort of an essential difference between a law which compels one to do some positive work and a law which merely forbids one to do some definite act. Yet a little reflection shows that there is no such real difference. To be prohibited from doing some things—such as eating—would be far more irksome than to be ordered to do other things. To be prohibited from eating except on condition of performing certain work is in practice equivalent to being ordered more directly to do that work. That is precisely what our law of property does to the propertyless man; it forbids him to do those things without which he cannot eat, unless he can get the consent of some owners of food or of owners of land on which he can produce his own food, and it does

not order them to give their consent. As a practical matter, he can get their consent only by offering them money; he can get money—being propertyless—only by offering his work to the owners of money. In short, our law orders him to work just as effectively as would any anti-strike law, the penalty for disobedience being starvation; and the choice of work open to him is often very small. True, the right of choice and the right to strike enable him in some cases to better the conditions and the pay of what none the less is in last analysis compulsory work; they do not destroy its compulsory character. To deprive him of the right to strike—and nobody proposes to deprive him of the right of choice—would not turn otherwise free labor into slave labor; it would unless safeguarded deprive him of one means of bettering his conditions and his pay. The real question is, then, whether an anti-strike law can be so safeguarded as to give him all legitimate weapons for improving his lot. Will it injure any *substantial* right he now enjoys? His right to freedom is only a theoretical right, except in so far as it bears on the actual conditions of his employment. If his actual conditions will be as good under compulsory wage-adjustment, then to forbid him to strike under pain of some adequate penalty—it need not be imprisonment—does him no substantial injury *if an adequate substitute can be found in the form of a wage board*. Whether it can be found or not is a question I cannot discuss now.

It must be admitted that the object of compulsory arbitration is to prevent the workers getting *all* that they might conceivably get if allowed to strike at any time; for an actual tie-up of the railroads could always be avoided by granting the men's demands, and if there is no objection to granting them there can be no object in forbidding a strike by law. It may be asked, if the men are engaged in compulsory labor, Why not permit them to free themselves by any means in their power? The answer is that while the system of property does compel the propertyless to work, they might be still worse off without the institution, for it also furnishes the incentive for much useful work on the part of owners, work which increases the supply of commodities and lowers their prices, making even those lowest down in the social system perhaps better off than they would be in the absence of that incentive. We cannot abolish compulsory labor; all we can do is so to modify the property system that the labor will be more equally borne by all classes and the fruits more equally distributed. This can be accomplished by price regulation, by taxation, and in part by wage fixing. There is obviously a limit to the possibility of betterment

through the last named method. If any class of workmen for whose services there is a *continuous* need are permitted to cease work simultaneously, there is obviously a possibility of their getting more, by reason of the temporary exigency, than they can possibly continue to get without injuring other compulsory workers more than they themselves are benefited. Just what the limit is it is difficult to define. If a satisfactory definition can be adopted, and if wage boards can be trusted to ascertain the proper wage as so defined, and if a suitable means of enforcement can be found, then a law forbidding strikes in continuous industries would deprive the workers only of a power to get more than they ought to get under the circumstances. If these conditions cannot be satisfied, an anti-strike law may conceivably deprive them of a power to get what they ought to be allowed to get. It will not in any case transform a previous state of liberty into one of slavery. The difficult thing is to agree upon what they "ought" to be allowed.

JOHN A. RYAN.—The friends of minimum wage legislation ought to be satisfied with Professor Le Rossignol's paper; for it is much more favorable to the project than anything that could have come from a man holding his point of view ten years ago. With some shifting of emphasis, I could accept most of what he says. I am glad that Professor Wolfe has called attention to the similarity between Professor Taussig's criticism of the minimum wage principle and the old wage-fund doctrine. For, if it be true that the minimum wage is likely to prove ineffective simply because the consumers will get most of the benefit of increased production, then the situation would be substantially the same as that imagined by the classical economists: the amount of product available for wage payments would be rather rigidly limited, to prove it.

Perhaps this assumption is correct, but some attempt ought to be made

MINUTES OF BUSINESS MEETINGS AT COLUMBUS

DECEMBER 28 TO 30, 1916

Pursuant to an announcement in the program a business meeting of the Association was held on Thursday, December 28, at 9 A.M., in the banquet hall of the Hotel Deshler, with President Carver in the chair.

The annual reports of the Secretary, the Treasurer, the Auditing Committee, and the Managing Editor of the *American Economic Review* were read, and each was, by vote, approved.

An informal report from the Committee on Federal Work in Statistics was presented by its chairman, Professor W. F. Willcox, and this report was, by vote, accepted as a report of progress.

Professor L. C. Marshall presented a report from the Committee on Methods of Arranging Programs for the Annual Meetings. Upon motion it was voted that the report be accepted, its recommendations approved, and the committee discharged.

The President announced the appointment of the following committees: On Nominations, Messrs. R. T. Ely, F. A. Fetter, David Kinley, J. H. Gray, and W. F. Willcox. On Resolutions, Messrs. E. L. Bogart, A. B. Wolfe, and F. S. Deibler.

A second business meeting of the Association was held in the banquet hall of the Hotel Deshler on Saturday, December 30, at 9.30 A.M., with President Carver in the chair.

The Secretary read a letter from Professor E. T. Towne, chairman of the Committee on Secondary Education, conveying an informal report of progress.

A report from the Committee on Prize Monographs was presented by Professor M. B. Hammond. On motion the report was accepted and the committee discharged.

Professor Richard T. Ely presented the report of the Committee on Nominations, as follows: for President, John R. Commons; for Vice-presidents, James E. Le Rossignol, Murray S. Wildman, and George Ray Wicker; for Secretary and Treasurer, Allyn A. Young; for members of the Executive Committee, William F. Gephart and Leon C. Marshall; for members of the Editorial Board, Frank A. Fetter and Herbert E. Mills.

By unanimous vote this report was accepted and the Secretary was authorized to cast the vote of the members present for the list of officers named. The vote was so cast and the officers named were elected.

Professor E. L. Bogart presented the following report from the Committee on Resolutions:

The American Economic Association desires to express its warm appreciation of the hospitality extended to its members by many individuals and organizations, which has helped so materially toward making the Twenty-ninth Annual Meeting a great success.

Especially it wishes to record its acknowledgement of the untiring and wholly successful efforts of the Committee on Local Arrangements, and also of the many courtesies extended during the course of the meetings by the Ohio State University, the Athletic Club of Columbus, the Chamber of Commerce, and the Social Workers of Columbus. To this end it requests the Secretary to transmit to each of these associations a copy of this resolution and to record it in the minutes of the Association.

E. L. BOGART,

F. S. DEIBLER,

A. B. WOLFE,

Committee on Resolutions.

Upon motion of Professor F. A. Fetter it was voted to instruct the Secretary to prepare and publish a directory of the teachers of economics who are members of the Association.

Upon motion of the Secretary the Executive Committee was authorized to consider and report upon the possible general reorganization of the American Economic Association so as to provide for a closer coöperation with other societies with allied interests.

Upon motion of Professor B. H. Hibbard the President was authorized to appoint a committee upon land colonization.

REPORT OF THE SECRETARY FOR THE YEAR ENDING DECEMBER 19, 1916

A meeting of the Executive Committee was held at the Harvard Club, New York, on October 14. There were present President Carver and Messrs. T. S. Adams, Babson, Fairchild, Mitchell, and Young. President Carver gave an account of his plans for the Twenty-ninth Annual Meeting, and there was an informal discussion of the program and of the general arrangements for the meeting.

At the previous annual meeting a resolution presented by Mr. R. R. Bowker was referred to the Executive Committee for action.¹ This resolution, which provided for the appointment of a special committee of five members on coördination, efficiency, and economy in taxation was, upon motion, adopted. President Carver has appointed the persons whose names follow as members of this committee: R. R. Bowker, chairman, H. C. Adams, T. S. Adams, Ogden L. Mills, and H. L. Lutz.

Upon motion of Professor T. S. Adams it was voted that the Editorial Board be asked to consider the advisability of publishing a bi-monthly journal made up of reprints and abstracts of articles and information on current economic problems, with a view to its use in connection with elementary courses in economics.

Upon motion of the Secretary it was voted to authorize the Committee upon Secondary Education in Economics to expend not more than \$500 in securing information as to the present status of instruction in economics in secondary schools.

No other meeting of the Executive Committee was held during the year.

Under authorization given at the previous annual meeting, the President and Secretary have appointed Messrs. E. T. Towne, F. R. Clow, and G. O. Virtue members of a special Committee on Secondary Education in Economics.² The President has also appointed the following specially-authorized committees: "To consider the advisability of the publication by the Association of an annual or occasional prize monograph, and to report upon plans and rules for the competition, if such be deemed advisable";³ Messrs. F. W. Taussig, M. B. Hammond, H. J. Davenport. To make recommendations for the invest-

¹ *Papers and Proceedings*, 28th Annual Meeting, p. 217.

² *Papers and Proceedings*, 28th Annual Meeting, p. 219.

³ *Papers and Proceedings*, 28th Annual Meeting, p. 217.

ment of some of the Association's funds: Messrs. R. W. Babson, S. B. Pearmain, W. Z. Ripley.

The changes in our list of members and subscribers are as follows:

New members added	266
New subscribers added	53
Total additions	— 319
Members resigned	138
Members removed for lack of address.....	6
Members dropped for non-payment of dues.....	72
Subscriptions discontinued	35
Deaths	21
Total subtractions	— 272
Net gain	47

Our members and subscribers now number 2489. This is the first year since our annual dues were increased from three dollars to five in which there has been a net gain in our membership. Now that our rolls have been pruned of the names of most of those who are not sufficiently interested in our work to continue to pay the increased annual dues it is to be hoped that each successive year may show some increase in our membership. With the continued help of those of our members who are actively interested in our work a period of steady growth in numbers and influence now seems possible. During the past year an especial effort has been made to increase the number of life members.

The Secretary regrets that he has to report the deaths of the members whose names follow:

ALLEN, WILLIAM F.	LIBBY, CHARLES F.
FERGUSON, RICHARD H.	LOW, SETH (Life Member)
GARDY, WILLIAM R.	LASKER, MORRIS
GORTON, ADELOS	LYMAN, ARTHUR T.
GRAY, JOHN C.	MELIUS, GEORGE E.
GARRARD, JEPHTAH	NEVILLE, GEORGE W.
HEWITT, C. M.	SCHWAB, JOHN CHRISTOPHER
HILL, JAMES J. (Life Member)	SYMMES, FRANK J.
HOXIE, ROBERT F.	VAILE, JOEL F.
KEPPLER, THEODORE L.	WELLS, EMILIE LOUISE
LEROY-BEAULIEU, PAUL (Honorary Member)	

Respectfully submitted.

ALLYN A. YOUNG,
Secretary.

REPORT OF THE TREASURER FOR THE YEAR ENDING DECEMBER 19, 1916

The transactions of the Treasurer's office during the year are summarized in the following exhibit of receipts and expenditures. A balance sheet and income statement are presented by the Auditing Committee, in its report.

RECEIPTS AND EXPENDITURES

1916		
Cash on hand December 18, 1915		\$3,417.89
<i>Receipts</i>		
Accounts Receivable	\$ 2.50	
Membership Dues	9,736.69	
Life Memberships	500.00	
Subscriptions	1,683.53	
Sales of Publications	408.21	
Interest	302.66	
Profit and Loss	1.00	
		<u>\$12,634.59</u>
		<u>\$16,052.48</u>
<i>Expenditures</i>		
Publications		
Review Printing	\$3,259.52	
Review Editorial	2,923.00	
Review Expenses and Supplies	1,513.79	
	<u>\$7,696.31</u>	
Proceedings and Handbook	1,105.73	
Sundry Publication Expense	171.03	
	<u>\$8,973.07</u>	
Secretary's Office		
Office Salaries	\$1,765.65	
Traveling Expenses	66.10	
Stationery and Printing	231.80	
Office Supplies	43.03	
Office Postage	302.14	
Telegraph and Telephone	54.57	
Express and Cartage	3.07	
Miscellaneous Expense	7.75	
Annual Meeting	192.85	
	<u>2,666.96</u>	
Insurance	66.50	
Storage of Publications	50.00	
	<u>\$11,756.53</u>	
Cash on hand December 19, 1916		
Ithaca Trust Company		
Interest account	\$800.00	
Checking account	59.00	
Checks not deposited	20.00	
Central Trust Company.....	3,416.95	
	<u>4,295.95</u>	
		<u>\$16,052.48</u>

Respectfully submitted.

ALLYN A. YOUNG,
Treasurer.

REPORT OF THE AUDITING COMMITTEE

Ithaca, N. Y., December 22, 1916.

To the American Economic Association:

An audit in detail of the accounts of the Secretary-Treasurer of the Association, for the fiscal year ended December 19, 1916, has been made by assistants under the direction of your committee. The accompanying statement of income and outgo, balance sheet, and exhibit of charges and credits to surplus, are in our opinion correct, and we certify that the ledger accounts are in full agreement with the balance sheet here presented.

Very respectfully,

DONALD ENGLISH,
ROBERT A. CAMPBELL,
ABBOTT PAYSON USHER,
Auditing Committee.

BALANCE SHEET

<i>Assets</i>		<i>Liabilities</i>	
Cash in Bank	\$79.00	Membership Dues Prepaid..	\$359.75
Cash in Savings Accounts ..	4,216.95	Life Memberships	500.00
Investments:		Reserves:	
New York City As-		Defaulted Membership	
essment Bond.....	\$1,000	Dues Receivable	\$500
United Fruit Com-		Bad Accts. Receivable	50
pany 4 1/2s of 1923...	2,000		550.00
	\$3,000.00	Surplus	8,079.42
Membership Dues Receivable	1,767.70		
Accounts Receivable.....	150.52		
Furniture and Fixtures in			
Secretary-Treasurer's Office	275.00		
	\$9,489.17		\$9,489.17

SURPLUS ACCOUNT

Balance December 18, 1915	\$7,978.08
Miscellaneous Credits—Net	16.75
	\$7,994.83
Defaulted Membership Dues	\$654.00
Less Reserve	475.00
	\$179.00
Uncollectible Accounts Receivable	\$56.59
Less Reserve	25.00
	31.59
	210.59
	\$7,784.24
Accounts Payable ¹	\$41.67
Insurance Prepaid ¹	32.00
	9.67
Net Surplus, 1916	\$7,793.91
	285.51
Surplus December 20, 1916	\$8,079.42

¹ These amounts written off, it being unnecessary to carry items on the balance sheet year after year. The "Accounts Payable" item represents rent due to the Princeton University Press from March to December at the rate of \$50.00 per annum.

INCOME STATEMENT

Ordinary Income	
Dues	\$10,156.69
Less Defaulted ²	62.50
Net	\$10,094.19
Interest	302.66
	<u>\$10,396.85</u>
Ordinary Outgo	
Office Salaries	\$1,765.65
Traveling Expenses	66.10
Stationary and Printing	231.80
Postage	301.48
Supplies	43.22
Telephone and Telegraph	54.57
Freight and Cartage	3.07
Insurance	2.00
Annual Meeting	201.31
Depreciation of Furniture and Fixtures	25.00
Miscellaneous	7.75
	<u>\$2,701.95</u>
Excess of Ordinary Income.....	\$7,694.90
Publication Outgo	
Printing	\$3,257.27
Editorial	1,500.00
Contributinal	1,423.00
Editorial Expenses	1,513.79
Proceedings and Handbook	1,105.73
Sundry Expenses	162.57
	<u>\$8,962.36</u>
Storage of Publications	50.00
Insurance	64.50
	<u>114.50</u>
	<u>\$9,076.86</u>
Publication Income	
Subscriptions	\$1,767.03
Less Defaulted ³	43.75
	<u>\$1,723.28</u>
Sales of Publications	494.19
	<u>2,217.47</u>
Excess of Outgo.....	\$6,859.39
Gross Surplus	\$ 835.51
Reserve for Defaulted Membership Dues	\$500.00
Reserve for Bad Accounts Receivable	50.00
	<u>550.00</u>
Net Surplus for the year	<u>\$285.51</u>

² Due from members for 1916 publications.³ Due from subscribers for 1916 publications.

REPORT OF THE MANAGING EDITOR OF THE AMERICAN
ECONOMIC REVIEW FOR THE YEAR ENDING
DECEMBER, 1916

During the past year there have been no marked changes in the editorial management of the Review. The volume just finished has approximately the same amount of printed matter as its immediate predecessor, 1024 pages as compared with 1003 in 1915. The cost of issuing the journal has slightly increased owing to the advance in the price of paper. The total cost for the year is \$7694.06, divided into principal items as follows:

Printing	\$3257.27
Salary of editor.....	1500.00
Payments to contributors.....	1423.00
Clerical assistance	1173.93
Supplies	339.86

\$7694.06

If the price of paper had remained at the figure prevailing during the past few years, the printing cost would have been \$190.91 less. If the higher price prevails during the coming year, it is probable that the cost of the journal will be increased by \$500. This will have to be met either by a larger appropriation, or by the introduction of certain economies and a reduction of the amount printed.

The following have served as the board of editors: Professor F. A. Fetter and Professor H. E. Mills, whose terms expire this year; Professor Clive Day and Professor H. J. Davenport, whose terms expire in 1917; and Professor T. W. Page and Dr. J. L. Coulter whose terms expire in 1918.

In abstracting of periodical articles on Theory, Professor A. N. Young, of Princeton University, has coöperated with Professor W. M. Adriance. Professor D. C. Barrett, who for more than three years has covered the field of Money and Banking with gratifying thoroughness and discrimination, is now obliged to discontinue the work, and Professor C. A. Phillips, of Dartmouth College, has kindly consented to assume it.

Appended are comparative tables showing the distribution of contents and the cost by principal items, in continuation of tables given in reports for preceding years.

DAVIS R. DEWEY,
Managing Editor.

1. PAGES GIVEN TO EACH SECTION

Year	Leading Articles	Reviews of Books	New Books Listed	Documents, Reports, Legislation	Periodical Abstracts	Notes	Doctoral Dissertations	Notes
1911	342	304	62	89	133	40	8	978
1912	351	298	101	110	186	41	11	1038
1913	347	268	104	141	167	43	8	1078
1914	327	243	136	113	166	35	10	1030
1915	314	257	90	142	144	42	14	1003
1916	388	256	91	90	140	46	13	1024

2. NUMBER OF ITEMS IN EACH SECTION

Year	Leading Articles	Reviews of Books	New Books Listed	Signed Notes in Documents Section	Periodical Abstracts
1911	21	207	785	27	1074
1912	17	213	1452	32	1727
1913	20	198	1416	42	1877
1914	20	145	1575	33	2021
1915	16	135	1062	29	1758
1916	24	143	1024	42	1586

3. PERCENTAGE GIVEN TO EACH SECTION

Year	Leading Articles	Reviews of Books	New Books Listed	Documents, Reports, Legislation	Periodical Abstracts	Notes	Doctoral Dissertations
1911	34.9	31.0	6.2	9.1	13.4	4.0	.8
1912	28.0	28.7	9.6	10.6	17.9	4.0	1.0
1913	32.2	24.9	9.6	13.0	15.5	4.0	.7
1914	31.8	23.6	13.2	11.0	16.1	3.4	.9
1915	31.3	25.7	9.0	14.2	14.4	4.2	1.3
1916	37.9	25.0	8.9	8.8	13.7	4.5	1.2

4. EXPENDITURES

Year	Printing	Salary of Editor	Payments to Contributors	Clerical Assistance	Supplies	Travelling Expenses	Totals
1911	\$2495.18	\$1500.00	\$1320.25	\$ 865.50	\$413.51	\$136.15	\$6730.59
1912	3220.83	1500.00	1114.50	794.89	292.68	. . .	6922.90
1913	3328.01	1500.00	1268.35	983.09	325.10	. . .	7404.55
1914	3023.62	1500.00	1312.25	1236.29	459.18	. . .	7531.34
1915	2834.91	1500.00	1210.00	1171.87	286.86	. . .	7003.64
1916	3257.27	1500.00	1422.50	1173.93	339.86	. . .	7694.06

REPORT OF COMMITTEE ON PRIZE MONOGRAPHS

The committee appointed at the last annual meeting to consider the advisability of the publication by the Association of an annual or occasional prize monograph reports as follows:

In order to ascertain the trend of opinion among active members of the Association, a circular letter was sent to about forty present and former officers of the Association, and their opinion was asked regarding three suggestions: first, that a prize monograph be published as suggested in the plan proposed at the last meeting; second, that a monograph without a prize be published annually or at reasonably frequent intervals on some subject in economic theory or closely connected with economic theory; third, that any additional funds at the disposal of the Association be used for the enlargement of the Review.

These three suggestions were put before the persons to whom the circular letter was sent in order that they might express their opinion not only upon the original proposal, but upon possible alternatives.

Your committee regrets to report that there was no consensus of opinion, and not even an approach to general agreement. On the prize monograph proposal it appeared that at least half were disinclined to accept it, a considerable proportion non-committal, and a very small number clearly in favor. As regards choice between the three possibilities, there was again no consensus of opinion. Upon the whole, the use of available funds for enlargement of the Review seemed to meet with most favor.

The committee has further conferred with the Treasurer, and has ascertained from him that, judging from the experience in the last four years, the Association could devote a sum of not less than \$500 nor more than \$1000 to some such purpose as has been indicated in the preceding statement. Your committee feels doubtful whether this sum

is sufficient to justify the Association in embarking on a new scheme for permanent additions to its publications; and your Committee is of the opinion that no such series should be started unless it could be maintained permanently.

On the whole, your committee reports that its conclusion is that it is inexpedient for the Association to take any action for a new series. The enlargement of the Review evidently met with favor among the persons addressed, and the maintenance of the Review at its present high standard seems unquestionably desirable. Should it appear that after all needed appropriation for the Review a considerable surplus should remain in hand during the next few years, the extension of the Association's publishing activities may be considered.

F. W. TAUSSIG,
M. B. HAMMOND,
H. J. DAVENPORT.

REPORT OF THE COMMITTEE ON METHODS OF ARRANGING PROGRAMS FOR THE ANNUAL MEETINGS

At the Washington meeting, December, 1915, your committee was appointed to consider whether the present method of arranging the programs of the annual meetings might wisely be modified. The committee corresponded with the former presidents of the Association and with some eight or ten other members concerning the proper scope and method of its work. On the basis of the suggestions received, a "first formulation of some points at issue" was drawn up in the form of a questionnaire and submitted to some eighty members of the Association, including former presidents, with a request for further counsel and criticism. The questionnaire finally sent out is in scope and in detail the result of this interchange of opinion and may be regarded as an honest attempt to ascertain the wishes of the membership.

It was decided, on grounds of economy, not to send the questionnaire to the entire membership of the Association. The Secretary of the Association gave the committee the names of those who had registered at the last two annual meetings and added to this list the names of a few other persons likely to be interested. In June, 1916, the questionnaire was mailed to 505 persons. By August 160 had replied. Duplicates were sent to the 345 who had not replied and 85 responded. The committee thus secured replies from 245 persons, 15 of whom returned the questionnaire with no answers made. The

resumé of answers is accordingly based on the 230 questionnaires which were answered in full or in part by December 5, 1916.

This resumé has been mimeographed and distributed so that detailed comment by your committee is unnecessary. If the replies to the questionnaire fairly represent the attitude of our membership, dissatisfaction with our present program methods is not serious. Perhaps it is not serious because it is the general feeling among the members that the chief purposes of the annual meetings are opportunities for personal contact and interchange of ideas. Nevertheless there is sufficient dissatisfaction to justify our future program makers in giving the matter serious consideration. By way of constructive suggestions, the replies indicate marked preferences (1) for some sectional meetings, (2) for announcing some topics early in the year with a general invitation to contribute, (3) for giving more time to discussion with a large number participating in such discussion, (4) for reasonably rigid adherence to time limits for both leading papers and discussions, and (5) for advance publication of leading papers.

A member of the committee made a study of the methods of several other associations. The desirable elements which he found in the methods of these associations are: (1) preprinting of papers; (2) limited time given to the authors of the papers, with a maximum time for general discussion; (3) sectional meetings, for a substantial part of the time; (4) control of programs in the hands of permanent committees; (5) combination of volunteer and solicited papers; (6) adequate opportunity for the author to reply, in print, to his critics. It will be noted that with the exception of (4) and (6), which issues were not definitely raised in the questionnaire, this finding is in substantial agreement with the outstanding preferences voiced in the answers to the questionnaire.

Your committee therefore finds as follows:

1. On the basis of the replies to the questionnaire and the investigation of the methods in use in other associations, we regard an improvement of our program methods practicable.

2. We recommend that this report and the resumé of the answers to the questionnaire be made accessible in permanent form, in such manner as seems wise to the Executive Committee of the Association, in order that (a) the data may be of service to future program makers; and that (b) the membership of the Association may have an opportunity to study the data and to take further action at a future meeting if it so desires.

The committee asks the privilege of substituting these recommenda-

tions, prior to their publication, to the absent member of the committee in order to give him an opportunity to concur in them or to dissent from them.

Respectfully submitted.

E. A. GOLDENWEISER,

L. C. MARSHALL, *Chairman.*

[The foregoing report was presented to and accepted by the Association. The absent member of the committee has subsequently submitted the following supplementary reports, with which Mr. Goldenweiser concurs.]

As the results of the questionnaire were tabulated too late for the committee to work out a report through correspondence, the two members of the committee who were present at the Columbus meeting have saved my rights to file a supplementary report—a courtesy for which I wish to express my thanks.

I would express general concurrence with the statements of the report presented at the meeting, with qualified dissent at one or two points. I wish to add certain information based on the investigation of the work of other associations, which was the task especially assigned me, and to make rather more specific recommendations than the main report contains.

A study of the questionnaire, together with verbal expressions from many members, leads me to feel that the degree of discontent with previous programs is rather greater than the main report would hold. Perhaps a better statement would be that the membership is more interested in *improving* the program than the report would indicate. Members expressing great discontent are not numerous (15). The number "somewhat dissatisfied" is large (64). The number "pleased but somewhat dissatisfied" is 8. Eighty-seven thus express some degree of dissatisfaction. Twenty-one express themselves as "very well pleased," and 79 as "pleased," a total of 110. This would indicate a preponderance of those who do not desire to make negative criticism, or to *find fault* with previous policies. It indicates an extensive dissatisfaction, none the less. When, however, the question of constructive changes is raised, a much higher percentage makes clear a desire for change. This is particularly evident on two points: (1) when the question of a general invitation to the membership to volunteer papers on announced topics is raised, and (2) when the question of having sectional meetings is raised. In favor of a general invitation to volunteer papers there were 134 votes giving unqualified approval; 21 votes giving qualified approval; one vote, "not always"; only 25 members opposed the plan. In favor of some sectional meetings there were 171 votes, and there were only 33 votes in favor of having all meetings general meetings. Of those who replied to the further question as to the proportion of time to be given to sectional meetings, the great majority desired to give one third or more of the time to sectional meetings. The proportion that meet the wishes of the largest number is one half.

The writer feels that the membership does not, as a whole, wish to take any stand that would indicate disapproval of what has been done. The programs have been good, and the men who have been responsible for them have done praiseworthy and unselfish work. But the membership does feel that improvement is possible and desirable.

The study of the work of other associations suggests some significant points. The associations investigated were: the American Historical Association; the Modern Language Association; the American Society of Civil Engineers; the American Mathematical Society; the American Society of Mechanical Engineers. In *none* of these organizations is the work of making the program left to the president. The American Society of Civil Engineers seems to

meet primarily for social purposes, and its work is not of particular interest for our purposes. From each of the others, however, it is possible to draw points of interest. I shall give chief attention to the American Society of Mechanical Engineers, whose methods seem to have most that we could advantageously borrow.

First, as stated, in none of these organizations does the annually changing president make the program. The matter is left with permanent officers or permanent committees. The gain that comes from this is decided. There is continuity of purpose; there is an accumulation of experience and knowledge of the membership; it is possible to get plans under way early. A former president of the American Economic Association stated to a member of the committee that preprinting of the papers, of which he was in favor, is virtually impossible under our present system, as the newly elected president cannot get things under way in time. Obviously, each new president must go over the whole ground afresh, must do work that has been done many times before, and in no case can he make plans for more than one year. There is no particular reason why he should be personally very well informed as to the researches which members of the Association have under way. There is a strong temptation—to which many of our presidents have not yielded—for the president to assign positions on the program only to the conspicuous men, with whose work he is acquainted, and of whose creditable performance he can be sure. A permanent committee, accumulating year by year fuller knowledge of the membership, and the work which individuals are doing, could much more safely call on less known men to make contributions.

A model for this seems to be found in the methods of the American Society of Mechanical Engineers, for information regarding which I am indebted to Professor L. S. Marks, of Harvard University. This society has a permanent program committee. There are also permanent sectional committees, appointed by the general committee. The sectional committees have control of the sectional programs. In the opinion of Professor Marks, the system works admirably.

In this association, papers are always printed in advance. The advance printing includes both the full paper and an abstract. The full papers are sent only to such members as ask for them. The papers appear later in the published proceedings, together with the discussions. The discussion of the papers is conducted under a strict time limit. The author states his theses in five or ten minutes. Then written discussions follow, after which a general discussion takes place. The author then may take five minutes for rebuttal. The author is allowed to expand his rebuttal in the published proceedings.

In this association, also, the system of volunteering papers is practiced. Papers are solicited from certain members, but all members are invited to volunteer. Papers may be volunteered on any topic in which a member is interested. The method of volunteering papers is as follows: A member writes a brief letter, stating the subject he would like to present, and his main theses; the committee involved passes upon this, and selects the most promising or most suitable volunteers; the members are then asked to prepare their papers, which the committee still reserves the right to reject. This is not, in practice, burdensome to the committees, although the membership numbers 6000, of whom from 1200 to 2000 attend the annual meeting in New York. It would be burdensome for a single officer. One association, whose secretary controls the program, and in which finished papers are volunteered, has developed informally a committee of men called on by the secretary, who relieve him of what would otherwise be an impossible burden.

It seems eminently desirable that the American Economic Association should make some provision for volunteered contributions. It is the clear desire of the membership that this be done, as shown above. The questionnaire raised only the question of a general invitation to contribute papers on topics announced by the program-making authority; the writer would urge that topics suggested by the volunteers should also be considered. There is a special reason why the authority to regulate this should be in the hands of committees rather

than a single officer; the matter would then be handled more impersonally, and disappointed volunteers would be less likely to feel personally aggrieved.

With reference to the proposed sectional meetings, it seems important to emphasize one point. In the questionnaire (question 7), "sectional meeting" and "round-table meeting" are made identical. This need not be the case. A sectional meeting at which most of the time is taken up in the reading of papers is not a "round-table" meeting. For a round-table meeting, it is essential that the main speakers should be brief, and that discussion should be general. This can be accomplished by the preprinting of papers, after which a brief summary of theses by the main speaker is sufficient. A strong preference for this is indicated by the vote. Another method (which might be especially suitable for the round-table on theory) would be to make an article or a chapter (or chapters) in a book recently published the basis of the discussion. This plan also met substantial approval in the replies to the questionnaire. It was proposed for the round-table on theory at the 1914 meeting by a group of over thirty men, including an ex-president of the Association, and was subsequently endorsed by a number of others, including two or three ex-presidents. At such meetings, the author of the main paper, or the book or article under discussion, should, of course, have opportunity to conclude the discussion, and should participate in it.

The following amendment to the Constitution of the American Economic Association is proposed for consideration by the Executive Committee and the members at the next annual meeting of the Association:

The program shall be arranged by a committee of five, consisting of the President, the Secretary, and three members elected at the annual business meetings on nominations from the floor. Of the three elected members chosen in the first year, one shall serve one year, one two years, and one three years, and thereafter elections, one each year, shall be for a term of three years. The number of years which each of the first three members shall serve shall be determined by lot after their election. The program committee shall organize a number of sections, corresponding to the major special interests of the membership, and shall appoint committees, with a permanent or slowly changing membership, which shall have charge of the programs for the sectional meetings. For the first two years after the adoption of this amendment, not less than one-third of the sessions of the annual meetings shall be given to sectional meetings. Thereafter, the general program committee shall have power to reduce this proportion if it deems it desirable to do so in the light of experience. The general program committee shall have power to create new sections and to abolish old ones; to reconstitute sectional committees; and to veto the plans of any sectional committee. The President shall have power to veto any item in any program proposed by any committee.

B. M. ANDERSON, JR.



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AMERICAN ECONOMIC ASSOCIATION

1917

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